

**SEMI-ANNUAL RADIOACTIVE  
EFFLUENT RELEASE REPORT  
JANUARY 1, 2011 THROUGH JUNE 30, 2011  
URENCO USA  
FACILITY OPERATING LICENSE SNM-2010  
LEA COUNTY, NEW MEXICO**

**by**

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**for**

**URENCO USA  
Lea County, New Mexico**

**File No. 37262-016  
August 2011**

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## LIST OF ACRONYMS AND ABBREVIATIONS

|        |                                            |
|--------|--------------------------------------------|
| NRC    | Nuclear Regulatory Commission              |
| CAB    | Centrifuge Assembly Building               |
| CFR    | Code of Federal Regulations                |
| CTPMF  | Centrifuge Test and Post Mortem Facilities |
| EFS    | Exhaust Filtration System                  |
| GEVS   | Gaseous Effluent Vent System               |
| HEPA   | High Efficiency Particulate Air            |
| HF     | Hydrogen Fluoride                          |
| LLD    | Lower Level of Detection                   |
| MDA    | Minimum Detectable Activity                |
| mm     | Millimeter                                 |
| SBM    | Separations Building Module                |
| UF6    | Uranium Hexafluoride                       |
| uCi/mL | MicroCurie per Milliliter                  |

## 1. INTRODUCTION

This *Semi-Annual Radioactive Effluent Release Report* was prepared for the reporting period of January 1, 2011 through June 30, 2011 for the URENCO USA facility in Lea County, New Mexico (Figure 1), in accordance with 10 CFR 70.59, "Effluent Monitoring Reporting Requirements" and pursuant to NRC Regulatory Guide 4.16, "Monitoring and Reporting Radioactive Materials in Liquid and Gaseous Effluents from Nuclear Fuel Cycle Facilities, Revision 2" dated December 2010. A semi-annual Radioactive Effluent Release Report is required under 10 CFR 70.59 to report the "quantity of each of the principal radionuclides released to unrestricted areas in liquid and gaseous effluents during the previous six months of operation..."

The URENCO USA facility uses a gas centrifuge process to enrich uranium-235 using natural uranium hexafluoride feed material. Uranium hexafluoride was located within the cylinders on the Uranium Byproduct Cylinder (UBC) storage pads, within the Centrifuge Assembly Building (CAB), and within the Separations Building Module-1001 (SBM-1001) (Figure 2) during the reporting period. Potential releases of radioactive effluents would have originated from gaseous (exhaust systems) or liquid (domestic wastewater/sewage) effluents from the CAB and SBM-1001.

The gaseous and liquid effluent data indicate there were no releases to the public during the reporting period that exceeded the requirements set forth in 10 CFR 20.1301, 10 CFR 20.1302, and 10 CFR 20.1101(d), as described in NRC Regulatory Guide 4.20 "Constraint on Releases of Airborne Radioactive Materials to the Environment for Licensees Other Than Power Reactors" dated December 1996.

## 2. GASEOUS EFFLUENT RELEASE LOCATIONS

### 2.1 Centrifuge Test and Post Mortem Facilities Exhaust Filtration System

Gaseous effluent from the Centrifuge Test and Post Mortem Facilities (CTPMF) is released through the Exhaust Filtration System (EFS), located in the Centrifuge Assembly Building (CAB) and monitored from the Control Room (Figure 2). The system ensures the CTPMF is maintained at a negative pressure.

The total air flow to be handled by the EFS is adequate to maintain negative pressure in the CTPMF. The EFS consists of a duct network that serves the CTPMF and operates at negative pressure. The ductwork is connected to a filter station that can handle 100% of the effluent. Work applications that require the EFS to be operational can be manually shut down if the EFS shuts down.

The minimum required EFS filter configuration is one pre-filter, one potassium carbonate impregnated activated carbon filter, and one high-efficiency particulate air (HEPA) filter. Additional filters may be used to provide adequate airflow. The pre-filter removes dust and debris, the potassium carbonate impregnated activated carbon filter removes hydrogen fluoride (HF), and the HEPA filter removes remaining uranic particles from the air stream. After filtration, the clean gases pass through a fan which maintains the negative pressure upstream of the filter station. The clean gases are then discharged through the monitored (alpha and HF) stack on the CAB.

The ABPM201S (alpha particulate monitor) is located adjacent to the filter train in the CTPMF EFS exhaust stack and receives a stream of air from the downstream side of the filters. The filter assembly is equipped with an isokinetic nozzle and is located within the exhaust stack to ensure turbulent flow. This ensures that particulate matter being collected on the filter is representative of particulate matter being released to the environment. The sample volume is pulled through a 47 mm Millipore® 3.0 micron, FSLW alpha profile filter paper to collect particulate matter. The filters are changed out on a weekly basis and submitted to Eberline Services of Oak Ridge, Tennessee under chain-of-custody for gross alpha, gross beta, and a quarterly composite isotopic uranium analysis. Gross alpha and gross beta were analyzed using method LANL MLR-100 Modified; isotopic uranium was analyzed using method EML U-02 Modified.

CTPMF EFS gaseous effluent results for gross alpha, gross beta, and isotopic uranium analyses for the reporting period are presented in Tables 1, 2, and 3, respectively. Analytical laboratory data sheets are provided in Appendix A.

The CTPMF EFS gaseous effluent gross alpha results (Table 1) were below the minimum detectable activity (MDA) except for three weekly samples:

| Date     | Sample               | Gross Alpha Activity (uCi/mL) | MDA (uCi/mL) | Gross Alpha License Basis Lower Level of Detection (LLD) (uCi/mL) |
|----------|----------------------|-------------------------------|--------------|-------------------------------------------------------------------|
| 03/02/11 | 1300-562-1MA1 110302 | 1.99E-16                      | 1.50E-16     | 1.0E-14                                                           |
| 03/30/11 | 1300-562-1MA1 110330 | 3.76E-16                      | 1.41E-16     | 1.0E-14                                                           |
| 06/23/11 | 11-226 110623        | 6.76E-16                      | 4.46E-16     | 1.0E-14                                                           |

All the gross alpha MDAs and detected activity results were less than the license basis lower level of detection (LLD) of 1.0E-14 microCuries per milliliter (uCi/mL) as defined in the Environmental Report Revision 19c (UUSA, 2011).

The CTPMF EFS gaseous effluent gross beta results (Table 2) were below the minimum detectable activity (MDA) except for four weekly samples:

| Date     | Sample               | Gross Beta Activity (uCi/mL) | MDA (uCi/mL) | Gross Beta Procedural Lower Level of Detection (LLD) (uCi/mL) |
|----------|----------------------|------------------------------|--------------|---------------------------------------------------------------|
| 04/20/11 | 1300-562-1MA1 110420 | 3.09E-15                     | 2.21E-15     | 1.0E-14                                                       |
| 06/23/11 | 11-226 110623        | 7.26E-15                     | 1.02E-15     | 1.0E-14                                                       |
| 06/29/11 | 1300-562-1MA1 110629 | 1.12E-14                     | 6.73E-15     | 1.0E-14                                                       |
| 06/30/11 | 11-232 110630        | 6.44E-15                     | 1.01E-15     | 1.0E-14                                                       |

All the gross beta MDAs and detected activity results, except 1300-562-1MA1 110629, were less than the URENCO USA Radiological Effluent minimum procedurally allowed LLD of 1.0E-14 uCi/mL (UUSA, 2010).

As described in Section 2.4, the PIS canister was installed improperly on 06/22/11. Consequently, the quantity released (Ci) calculated for sample period 06/22/11 – 06/29/11 (sample 1300-562-1MA1 110629) may not be representative. As an alternative measurement of gross alpha and gross beta release during this week, local area air filters 11-226 and 11-232 were analyzed. These local air filters were collected from the CTPMF in the area that services as inlet to the Special Filtration Unit.

Isotopic uranium results for the CTPMF EFS gaseous effluent samples collected during the first quarter of 2011 (Table 3) were below the minimum detectable activities (MDA) for Uranium-234 and Uranium-238. The first quarter Uranium-235 activity was well below (i.e., 0.0004%) the value in 10 CFR 20, Appendix B, Table 2. CTPMF EFS gaseous effluent isotopic uranium results for the second quarter of 2011 were also well below reporting criteria (i.e., 0.005% of the values in 10 CFR 20, Appendix B, Table 2) for both Uranium-234 and Uranium-238. The second quarter Uranium-235 activity was below the MDA.

Appendix B to 10 CFR 20 is “Annual Limits on Intake (ALIs) and Derived Air Concentrations (DACs) of Radionuclides for Occupational Exposure; Effluent Concentrations; Concentrations for Release to Sewerage”. Table 2 provides effluent concentrations for both air and water. Per Table 2, the effluent concentrations for air, Class D, are U234=3E-12 uCi/mL; U235=3E-12 uCi/mL; U238=3E-12 uCi/mL.

Except for the gross beta result for 06/29/11, detected radionuclide activity values in the CTPMF EFS gaseous effluent samples were below the license basis lower level of detection (LLD) of 1.0E-14 uCi/mL (UUSA, 2011).

## 2.2 Separations Building Module-1001 Pumped Extract Gaseous Effluent Vent System

The Pumped Extract Gaseous Effluent Vent System (GEVS) is designed to route gaseous streams from the Separations Building Module-1001 (SBM-1001) through filters for treatment before discharge to the atmosphere. Pre-filters and high efficiency particulate air (HEPA) filters remove particulates and impregnated activated carbon filters are used for the removal of HF.

Radioactivity levels within the GEVS stack are continuously monitored from the Control Room. The Pumped Extract GEVS is a Safe-By-Design system located in the UF6 Handling Area of SBM-1001 that provides exhaust of potentially hazardous contaminants for the SBMs from all permanently connected vacuum pump and trap sets, as well as temporary connections used by maintenance and sampling rigs.

There are two redundant continuous air monitoring devices in the GEVS (1MA1 and 1MA2). Similar to the CTPMF vent system, the alpha particulate monitors are located adjacent to the filter train in the Pumped Extract GEVS exhaust stack and receive a stream of air from the downstream side of the filters. The filter assemblies are equipped with isokinetic nozzles and are located within the exhaust stack to ensure turbulent flow. This ensures that particulate matter being collected on the filter is representative of particulate matter being released to the environment. The sample volume is pulled through a 47 mm Millipore® 3.0 micron, FSLW alpha profile filter paper to collect particulate matter. The filters are changed out on a weekly basis and submitted to Eberline Services of Oak Ridge, Tennessee under chain-of-custody for gross alpha, gross beta, and isotopic uranium analysis. Gross alpha and gross beta were analyzed using method LANL MLR-100 Modified; isotopic uranium was analyzed using method EML U-02 Modified.

SBM-1001 GEVS gaseous effluent results for gross alpha, gross beta, and isotopic uranium analyses for the reporting period are presented in Tables 4, 5, and 6, respectively. Analytical laboratory data sheets are provided in Appendix A.

Except for six samples, the SBM-1001 GEVS gaseous effluent gross alpha and gross beta results for both 1MA1 and 1MA2 were below the MDA. All MDAs and detected activities in the samples were below the license basis gross alpha LLD and the URENCO USA minimum procedural gross beta LLD of 1.0E-14 uCi/mL (UUSA, 2010, 2011) except for the gross beta result for 02/23/11.

| Date     | Sample               | Gross Alpha Activity (uCi/mL) | MDA (uCi/mL) | Gross Alpha License Basis Lower Level of Detection (LLD) (uCi/mL) |
|----------|----------------------|-------------------------------|--------------|-------------------------------------------------------------------|
| 1MA1     |                      |                               |              |                                                                   |
| 01/05/11 | 1001-562-1MA1 110105 | 2.22E-16                      | 1.33E-16     | 1.0E-14                                                           |
| 03/30/11 | 1001-562-1MA1 110330 | 1.32E-16                      | 1.32E-16     | 1.0E-14                                                           |
| 1MA2     |                      |                               |              |                                                                   |
| 02/09/11 | 1001-562-1MA2 110209 | 5.14E-16                      | 1.71E-16     | 1.0E-14                                                           |
| 05/18/11 | 1001-562-1MA2 110518 | 9.69E-16                      | 5.64E-16     | 1.0E-14                                                           |

| Date     | Sample               | Gross Beta Activity (uCi/mL) | MDA (uCi/mL) | Gross Beta Procedural Lower Level of Detection (LLD) (uCi/mL) |
|----------|----------------------|------------------------------|--------------|---------------------------------------------------------------|
| 1MA1     |                      |                              |              |                                                               |
| 05/04/11 | 1001-562-1MA1 110504 | 2.71E-15                     | 1.76E-15     | 1.0E-14                                                       |
| 1MA2     |                      |                              |              |                                                               |
| 02/23/11 | 1001-562-1MA2 110223 | 1.03E-14                     | 2.14E-15     | 1.0E-14                                                       |

Isotopic uranium results for the first and second quarters of 2011 ranged from below the MDA to 0.005% of the value in 10 CFR 20, Appendix B, Table 2 for both 1MA1 and 1MA2 (Table 6). Uranium-234 and Uranium-238 activities were above the MDA at 1MA1 during the second quarter, and were 0.005% and 0.004%, respectively, of the values in 10 CFR 20, Appendix B, Table 2. Uranium-234, -235, and -238 results at 1MA2 ranged from 0.0005% to 0.005% of the values in 10 CRF 20, Appendix B, Table 2.

Except for the gross beta result for 02/23/11, detected radionuclide activity values were below the license basis LLD of 1.0E-14 uCi/mL (UUSA, 2011).

### 2.3 Sampling Data Gaps

There were no sampling data gaps for the reporting period for either the pumped extract GEVS in the SBM-1001 or the EFS in the CTPMF. The vent systems were not active during planned power outages and down times, therefore no effluent was released during those instances. A summary of sampling program deviations and program adjustments is provided in Section 2.4.

### 2.4 Sampling Program Deviations

There was only one unplanned deviation to the sampling program during the reporting period, and it is described in the following table:

| 1300-562-1MA1 Alpha Monitor Exception Log |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|-------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Date Range                                | Reason for 7 Day Deviation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| 6/22/11@10:12 to<br>6/29/11@10:14         | PIS canister was not properly installed by Operations on 6/22/11 and Chemistry was notified that the monitor was alarming. On 6/27/11 Chemistry investigated and properly installed the canister. The low filter volume and potential for non-representative sampling was identified. Local area Air filters # 11-226 110623 & 11-232 110630 were therefore sent for analysis to cover this time period for the alpha monitor. The Local area air filters are collected from the CTF in the area that services as inlet to the Special filtration Unit and therefore is not processed. |

### **3. LIQUID EFFLUENT RELEASE LOCATION**

#### **3.1 Lift Station 1**

Domestic wastewater (sewage) generated at the CAB and SBM-1001, along with other domestic wastewater generated at the URENCO USA facility, is discharged off site to the Eunice Waste Water Treatment Plant. Domestic wastewater is not expected to contain process water, as the facility design does not allow discharge of process liquid effluent to the domestic wastewater system. Domestic wastewater is sampled quarterly at Lift Station 1, which is a central collection point for all domestic waste generated at the URENCO USA facility prior to off-site discharge (Figure 2). The average estimated wastewater discharge to the Eunice Waste Water Treatment Plant is approximately 13,000 gallons per day (UUSA, 2011).

Wastewater samples were collected at Lift Station 1 on January 21, 2011 and April 12, 2011 and submitted to GEL Laboratories, LLC of Charleston, South Carolina under chain-of-custody for isotopic uranium analysis using method EML U-02 Modified.

Domestic wastewater effluent results for isotopic uranium analyses for the reporting period are presented in Table 7. Analytical laboratory data sheets are provided in Appendix A.

Uranium-234, -235, and -238 results in wastewater samples collected from Lift Station 1 during the first and second quarters of 2011 were above the MDA. Results of analyses for Uranium-234 ranged from 0.04% to 0.06% of the values in 10 CFR 20, Appendix B, Table 3. Uranium-235 ranged from 0.001% to 0.002% of the values in 10 CFR 20, Appendix B, Table 3. Uranium-238 ranged from 0.02% to 0.03% of the values in 10 CFR 20, Appendix B, Table 3.

All detected radionuclide activity values in sampled collected from Lift Station 1 were below the license basis lower level of detection (LLD) of  $3.0\text{E-}9$  uCi/mL (UUSA, 2011).

#### **3.2 Sampling Data Gaps**

There were no sampling data gaps at Lift Station 1 during the reporting period.

#### **3.3 Sampling Program Deviations and Program Adjustments**

There were no sampling program deviations or program adjustments during the reporting period. Wastewater sample collection and analysis at Lift Station 1 was performed pursuant to the New Mexico Environment Department Discharge Permit DP-1481 (NMED 2007, 2008, 2011).

#### **4. DOSE TO MEMBERS OF THE PUBLIC**

Isotopic uranium activity in gaseous effluent was either below the MDA or less than 10% of values listed in 10 CFR 20, Appendix B, Table 2, "Effluent Concentrations – Class D Air" for U234, U235, and U238. This demonstrates compliance with 10 CFR 20.1301, 10 CFR 20.1302, and 10 CFR 20.1101(d), as described in NRC Regulatory Guide 4.20 "Constraint on Releases of Airborne Radioactive Materials to the Environment for Licensees other than Power Reactors" dated December 1996.

Domestic wastewater effluent activity ranged from 0.001% - 0.06% of the value listed in 10 CFR 20, Appendix B, Table 3, "Releases to Sewers".

This demonstrates compliance with 10 CFR 20.1301 and 10 CFR 20.1302.

## REFERENCES

1. New Mexico Environment Department (NMED), 2007. *Discharge Permit DP-1481*. February 28, 2007.
2. New Mexico Environment Department (NMED), 2008. *Amendment to Discharge Permit DP-1481*. November 24, 2008.
3. New Mexico Environment Department (NMED), 2011. *Amendment to Discharge Permit DP-1481*. May 18, 2011.
4. URENCO USA (UUSA), 2010. *Radiological Effluent and Environmental Monitoring, Procedure EN-3-1000-02, Revision 5*. Effective date February 26, 2010.
5. URENCO USA (UUSA), 2011. *Environmental Report, Revision 19c*. Issue date June 7, 2011.
6. U.S. Nuclear Regulatory Commission, 1996. Regulatory Guide 4.20, *Constraint on Releases of Airborne Radioactive Materials to the Environment for Licensees Other Than Power Reactors*. December 1996.
7. U.S. Nuclear Regulatory Commission, 2010. Regulatory Guide 4.16, *Monitoring and Reporting Radioactive Materials in Liquid and Gaseous Effluents from Nuclear Fuel Cycle Facilities*. December 2010.
8. U.S. Nuclear Regulatory Commission. 10 CFR 20.1101. *Radiation Protection Programs*.
9. U.S. Nuclear Regulatory Commission. 10 CFR 20.1302. *Compliance with Dose Limits for Individual Members of the Public*.
10. U.S. Nuclear Regulatory Commission. 10 CFR 20.1301. *Dose Limits for Individual Members of the Public*.
11. U.S. Nuclear Regulatory Commission. 10 CFR 20. Appendix B. *Annual Limits on Intake (ALIs) and Derived Air Concentrations (DACs) of Radionuclides for Occupational Exposure; Effluent Concentrations; Concentrations for Release to Sewerage*. Tables 2 and 3.
12. U.S. Nuclear Regulatory Commission. 10 CFR 40.75. *Effluent Monitoring Reporting Requirements*.

**TABLE 1**  
**CENTRIFUGE TEST AND POST MORTEM FACILITIES (CTPMF)**  
**EXHAUST FILTRATION SYSTEM GASEOUS EFFLUENT - GROSS ALPHA**  
 URENCO USA  
 Lea County, New Mexico

| Sample ID            | Sample Date    | Sample Period       | Gross Alpha (uCi/mL)   |                         |                                                  |                    | Total CTPM<br>Exhaust Filtration<br>System Flow (m <sup>3</sup> ) | Quantity Released (Ci) |
|----------------------|----------------|---------------------|------------------------|-------------------------|--------------------------------------------------|--------------------|-------------------------------------------------------------------|------------------------|
|                      |                |                     | Gross Alpha<br>Results | Counting<br>Uncertainty | Combined<br>Standard<br>Uncertainty<br>(2-sigma) | Gross Alpha<br>MDA |                                                                   |                        |
| 1300-562-1MA1 110105 | 01/05/11 09:16 | 12/29/10 - 01/05/11 | 4.57E-17               | 1.55E-16                | 1.55E-16                                         | 5.05E-16           | 3.14E+06                                                          | Result below MDA       |
| 1300-562-1MA1 110112 | 01/12/11 09:35 | 01/05/11 - 01/12/11 | 4.93E-17               | 2.16E-16                | 2.16E-16                                         | 5.45E-16           | 3.14E+06                                                          | Result below MDA       |
| 1300-562-1MA1 110119 | 01/19/11 10:25 | 01/12/11 - 01/19/11 | 9.34E-17               | 3.42E-16                | 3.42E-16                                         | 8.92E-16           | 3.14E+06                                                          | Result below MDA       |
| 1300-562-1MA1 110126 | 01/26/11 10:10 | 01/19/11 - 01/26/11 | 4.86E-17               | 2.13E-16                | 2.13E-16                                         | 5.37E-16           | 3.14E+06                                                          | Result below MDA       |
| 1300-562-1MA1 110202 | 02/02/11 09:46 | 01/26/11 - 02/02/11 | 5.02E-16               | 3.63E-16                | 3.67E-16                                         | 1.17E-15           | 3.14E+06                                                          | Result below MDA       |
| 1300-562-1MA1 110209 | 02/09/11 09:35 | 02/02/11 - 02/09/11 | 1.40E-16               | 3.30E-16                | 3.30E-16                                         | 8.92E-16           | 3.14E+06                                                          | Result below MDA       |
| 1300-562-1MA1 110216 | 02/16/11 10:21 | 02/09/11 - 02/16/11 | 4.70E-17               | 2.06E-16                | 2.06E-16                                         | 5.20E-16           | 3.17E+06                                                          | Result below MDA       |
| 1300-562-1MA1 110223 | 02/23/11 10:10 | 02/16/11 - 02/23/11 | 2.12E-16               | 4.16E-16                | 4.17E-16                                         | 1.12E-15           | 3.11E+06                                                          | Result below MDA       |
| 1300-562-1MA1 110302 | 03/02/11 10:21 | 02/23/11 - 03/02/11 | 1.99E-16               | 1.95E-16                | 1.97E-16                                         | 1.50E-16           | 3.14E+06                                                          | 6.27E-10               |
| 1300-562-1MA1 110309 | 03/09/11 10:09 | 03/02/11 - 03/09/11 | 2.76E-16               | 2.85E-16                | 2.87E-16                                         | 8.79E-16           | 3.11E+06                                                          | Result below MDA       |
| 1300-562-1MA1 110316 | 03/16/11 09:18 | 03/09/11 - 03/16/11 | 1.91E-16               | 2.65E-16                | 2.66E-16                                         | 8.11E-16           | 3.09E+06                                                          | Result below MDA       |
| 1300-562-1MA1 110323 | 03/23/11 10:07 | 03/16/11 - 03/23/11 | 9.36E-17               | 2.25E-16                | 2.25E-16                                         | 6.74E-16           | 3.09E+06                                                          | Result below MDA       |
| 1300-562-1MA1 110330 | 03/30/11 09:50 | 03/23/11 - 03/30/11 | 3.76E-16               | 2.60E-16                | 2.64E-16                                         | 1.41E-16           | 3.11E+06                                                          | 1.17E-09               |
| 1300-562-1MA1 110406 | 04/06/11 10:08 | 03/30/11 - 04/06/11 | 2.71E-16               | 2.80E-16                | 2.82E-16                                         | 8.64E-16           | 3.11E+06                                                          | Result below MDA       |
| 1300-562-1MA1 110413 | 04/13/11 10:02 | 04/06/11 - 04/13/11 | 4.01E-16               | 3.81E-16                | 3.83E-16                                         | 1.08E-15           | 3.11E+06                                                          | Result below MDA       |
| 1300-562-1MA1 110420 | 04/20/11 09:36 | 04/13/11 - 04/20/11 | 3.77E-16               | 3.69E-16                | 3.72E-16                                         | 1.07E-15           | 3.11E+06                                                          | Result below MDA       |
| 1300-562-1MA1 110427 | 04/27/11 10:00 | 04/20/11 - 04/27/11 | 1.04E-16               | 2.49E-16                | 2.49E-16                                         | 5.73E-16           | 3.11E+06                                                          | Result below MDA       |
| 1300-562-1MA1 110504 | 05/04/11 14:29 | 04/27/11 - 05/04/11 | 3.63E-16               | 3.08E-16                | 3.10E-16                                         | 9.53E-16           | 3.20E+06                                                          | Result below MDA       |
| 1300-562-1MA1 110511 | 05/11/11 09:43 | 05/04/11 - 05/11/11 | 0.00E+00               | 2.14E-16                | 2.14E-16                                         | 6.04E-16           | 3.03E+06                                                          | Result below MDA       |
| 1300-562-1MA1 110518 | 05/18/11 09:56 | 05/11/11 - 05/18/11 | 4.59E-17               | 2.38E-16                | 2.38E-16                                         | 6.60E-16           | 3.11E+06                                                          | Result below MDA       |
| 1300-562-1MA1 110525 | 05/25/11 10:07 | 05/18/11 - 05/25/11 | 1.84E-16               | 3.61E-16                | 3.61E-16                                         | 9.67E-16           | 3.09E+06                                                          | Result below MDA       |
| 1300-562-1MA1 110601 | 06/01/11 10:07 | 05/25/11 - 06/01/11 | 4.75E-17               | 2.46E-16                | 2.47E-16                                         | 6.84E-16           | 3.09E+06                                                          | Result below MDA       |
| 1300-562-1MA1 110608 | 06/08/11 08:44 | 06/01/11 - 06/08/11 | 5.12E-16               | 3.70E-16                | 3.74E-16                                         | 1.20E-15           | 2.55E+06                                                          | Result below MDA       |
| 1300-562-1MA1 110615 | 06/15/11 10:14 | 06/08/11 - 06/15/11 | 4.80E-17               | 2.49E-16                | 2.49E-16                                         | 6.91E-16           | 3.06E+06                                                          | Result below MDA       |
| 1300-562-1MA1 110622 | 06/22/11 10:05 | 06/15/11 - 06/22/11 | 9.88E-17               | 3.06E-16                | 3.06E-16                                         | 7.11E-16           | 3.06E+06                                                          | Result below MDA       |
| 1300-562-1MA1 110629 | 06/29/11 10:14 | 06/22/11 - 06/29/11 | 2.59E-15               | 1.42E-15                | 1.44E-15                                         | 4.39E-15           | 3.03E+06                                                          | *Result below MDA      |
| 11-226 110623        | 06/23/11 13:11 | 06/23/11 - 06/30/11 | 6.76E-16               | 3.06E-16                | 3.15E-16                                         | 4.46E-16           | 3.03E+06                                                          | *2.05E-09              |
| 11-232 110630        | 06/30/11 16:00 | 06/23/11 - 06/30/11 | 2.94E-16               | 2.03E-16                | 2.06E-16                                         | 3.26E-16           | 3.03E+06                                                          | *Result below MDA      |

**NOTES:**

1. uCi/mL = microCuries per milliliter.
2. m<sup>3</sup> = cubic meters.
3. MDA = minimum detectable activity.
4. Gross alpha analyzed using method LANL MLR-100 Modified by Eberline Services of Oak Ridge, TN.
5. All detected activity values were less than the facility-required lower level of detection of 1.0E-14 uCi/mL for gaseous effluent samples (UUSA, 2011).
6. \* = See Section 2.4 for 1300-562-1MA1 Alpha Monitor Exception Log.

Haley &amp; Aldrich, Inc.

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**TABLE 2**  
**CENTRIFUGE TEST AND POST MORTEM FACILITIES (CTPMF)**  
**EXHAUST FILTRATION SYSTEM GASEOUS EFFLUENT - GROSS BETA**  
 URENCO USA  
 Lea County, New Mexico

| Sample ID            | Sample Date    | Sample Period       | Gross Beta (uCi/mL)   |                         |                                                  |                   | Total CTPM<br>Exhaust Filtration<br>System Flow (m <sup>3</sup> ) | Quantity Released (Ci) |
|----------------------|----------------|---------------------|-----------------------|-------------------------|--------------------------------------------------|-------------------|-------------------------------------------------------------------|------------------------|
|                      |                |                     | Gross Beta<br>Results | Counting<br>Uncertainty | Combined<br>Standard<br>Uncertainty<br>(2-sigma) | Gross Beta<br>MDA |                                                                   |                        |
| 1300-562-1MA1 110105 | 01/05/11 09:16 | 12/29/10 - 01/05/11 | -6.77E-16             | 9.84E-16                | 9.88E-16                                         | 2.18E-15          | 3.14E+06                                                          | Result below MDA       |
| 1300-562-1MA1 110112 | 01/12/11 09:35 | 01/05/11 - 01/12/11 | 1.46E-16              | 1.11E-15                | 1.11E-15                                         | 2.35E-15          | 3.14E+06                                                          | Result below MDA       |
| 1300-562-1MA1 110119 | 01/19/11 10:25 | 01/12/11 - 01/19/11 | -1.40E-15             | 9.98E-16                | 1.02E-15                                         | 2.29E-15          | 3.14E+06                                                          | Result below MDA       |
| 1300-562-1MA1 110126 | 01/26/11 10:10 | 01/19/11 - 01/26/11 | -8.20E-16             | 9.74E-16                | 9.81E-16                                         | 2.19E-15          | 3.14E+06                                                          | Result below MDA       |
| 1300-562-1MA1 110202 | 02/02/11 09:46 | 01/26/11 - 02/02/11 | -3.59E-16             | 1.24E-15                | 1.24E-15                                         | 2.68E-15          | 3.14E+06                                                          | Result below MDA       |
| 1300-562-1MA1 110209 | 02/09/11 09:35 | 02/02/11 - 02/09/11 | -1.12E-15             | 1.01E-15                | 1.02E-15                                         | 2.29E-15          | 3.14E+06                                                          | Result below MDA       |
| 1300-562-1MA1 110216 | 02/16/11 10:21 | 02/09/11 - 02/16/11 | -5.95E-16             | 9.54E-16                | 9.57E-16                                         | 2.11E-15          | 3.17E+06                                                          | Result below MDA       |
| 1300-562-1MA1 110223 | 02/23/11 10:10 | 02/16/11 - 02/23/11 | -1.15E-15             | 1.13E-15                | 1.15E-15                                         | 2.55E-15          | 3.11E+06                                                          | Result below MDA       |
| 1300-562-1MA1 110302 | 03/02/11 10:21 | 02/23/11 - 03/02/11 | -7.30E-16             | 1.07E-15                | 1.08E-15                                         | 2.37E-15          | 3.14E+06                                                          | Result below MDA       |
| 1300-562-1MA1 110309 | 03/09/11 10:09 | 03/02/11 - 03/09/11 | -2.39E-16             | 8.83E-16                | 8.83E-16                                         | 1.92E-15          | 3.11E+06                                                          | Result below MDA       |
| 1300-562-1MA1 110316 | 03/16/11 09:18 | 03/09/11 - 03/16/11 | 1.05E-15              | 9.03E-16                | 9.14E-16                                         | 1.80E-15          | 3.09E+06                                                          | Result below MDA       |
| 1300-562-1MA1 110323 | 03/23/11 10:07 | 03/16/11 - 03/23/11 | 7.43E-16              | 8.54E-16                | 8.60E-16                                         | 1.74E-15          | 3.09E+06                                                          | Result below MDA       |
| 1300-562-1MA1 110330 | 03/30/11 09:50 | 03/23/11 - 03/30/11 | 5.60E-17              | 9.14E-16                | 9.14E-16                                         | 1.96E-15          | 3.11E+06                                                          | Result below MDA       |
| 1300-562-1MA1 110406 | 04/06/11 10:08 | 03/30/11 - 04/06/11 | 1.29E-15              | 1.01E-15                | 1.03E-15                                         | 2.02E-15          | 3.11E+06                                                          | Result below MDA       |
| 1300-562-1MA1 110413 | 04/13/11 10:02 | 04/06/11 - 04/13/11 | 5.63E-16              | 9.99E-16                | 1.00E-15                                         | 2.07E-15          | 3.11E+06                                                          | Result below MDA       |
| 1300-562-1MA1 110420 | 04/20/11 09:36 | 04/13/11 - 04/20/11 | 3.09E-15              | 1.18E-15                | 1.26E-15                                         | 2.21E-15          | 3.11E+06                                                          | 9.62E-09               |
| 1300-562-1MA1 110427 | 04/27/11 10:00 | 04/20/11 - 04/27/11 | 1.52E-16              | 1.01E-15                | 1.01E-15                                         | 2.15E-15          | 3.11E+06                                                          | Result below MDA       |
| 1300-562-1MA1 110504 | 05/04/11 14:29 | 04/27/11 - 05/04/11 | 6.05E-16              | 1.09E-15                | 1.09E-15                                         | 2.26E-15          | 3.20E+06                                                          | Result below MDA       |
| 1300-562-1MA1 110511 | 05/11/11 09:43 | 05/04/11 - 05/11/11 | -2.54E-16             | 1.07E-15                | 1.07E-15                                         | 2.33E-15          | 3.03E+06                                                          | Result below MDA       |
| 1300-562-1MA1 110518 | 05/18/11 09:56 | 05/11/11 - 05/18/11 | -8.97E-16             | 9.70E-16                | 9.78E-16                                         | 2.17E-15          | 3.11E+06                                                          | Result below MDA       |
| 1300-562-1MA1 110525 | 05/25/11 10:07 | 05/18/11 - 05/25/11 | -1.24E-15             | 9.97E-16                | 1.01E-15                                         | 2.26E-15          | 3.09E+06                                                          | Result below MDA       |
| 1300-562-1MA1 110601 | 06/01/11 10:07 | 05/25/11 - 06/01/11 | 2.29E-16              | 9.40E-16                | 9.40E-16                                         | 1.99E-15          | 3.09E+06                                                          | Result below MDA       |
| 1300-562-1MA1 110608 | 06/08/11 08:44 | 06/01/11 - 06/08/11 | 9.66E-16              | 1.08E-15                | 1.09E-15                                         | 2.20E-15          | 2.55E+06                                                          | Result below MDA       |
| 1300-562-1MA1 110615 | 06/15/11 10:14 | 06/08/11 - 06/15/11 | 3.88E-16              | 9.82E-16                | 9.83E-16                                         | 2.06E-15          | 3.06E+06                                                          | Result below MDA       |
| 1300-562-1MA1 110622 | 06/22/11 10:05 | 06/15/11 - 06/22/11 | -1.47E-16             | 9.91E-16                | 9.92E-16                                         | 2.14E-15          | 3.06E+06                                                          | Result below MDA       |
| 1300-562-1MA1 110629 | 06/29/11 10:14 | 06/22/11 - 06/29/11 | 1.12E-14              | 3.73E-15                | 4.04E-15                                         | 6.73E-15          | 3.03E+06                                                          | *3.39E-08              |
| 11-226 110623        | 06/23/11 13:11 | 06/23/11 - 06/30/11 | 7.26E-15              | 7.87E-16                | 1.28E-15                                         | 1.02E-15          | 3.03E+06                                                          | *2.20E-08              |
| 11-232 110630        | 06/30/11 16:00 | 06/23/11 - 06/30/11 | 6.44E-15              | 7.57E-16                | 1.17E-15                                         | 1.01E-15          | 3.03E+06                                                          | *1.95E-08              |

**NOTES:**

1. uCi/mL = microCuries per milliliter.
2. m<sup>3</sup> = cubic meters.
3. MDA = minimum detectable activity.
4. Gross beta analyzed using method LANL MLR-100 Modified by Eberline Services of Oak Ridge, TN.
5. \* = See Section 2.4 for 1300-562-1MA1 Alpha Monitor Exception Log.

**TABLE 3**  
**CENTRIFUGE TEST AND POST MORTEM FACILITIES (CTPMF)**  
**EXHAUST FILTRATION SYSTEM GASEOUS EFFLUENT**  
**QUARTERLY FILTER COMPOSITE RESULTS - RADIONUCLIDES**  
 URENCO USA  
 Lea County, New Mexico

| Radionuclide / Sample ID              | Sample Date    | Sample Period       | Results<br>(uCi/mL) | Counting<br>Uncertainty<br>(uCi/mL) | Combined<br>Standard<br>Uncertainty<br>(2-sigma)<br>(uCi/mL) | MDA<br>(uCi/mL) | Total CTPM<br>Exhaust Filtration<br>System Flow (m <sup>3</sup> ) | Quantity Released<br>(Ci) | % of Table 2 of Appendix<br>B to 10 CFR Part 20<br>Values |
|---------------------------------------|----------------|---------------------|---------------------|-------------------------------------|--------------------------------------------------------------|-----------------|-------------------------------------------------------------------|---------------------------|-----------------------------------------------------------|
| Uranium-234 / 1300-562-1MA1 QTR1 2011 | 03/30/11 09:50 | 12/29/10 - 03/30/11 | 1.54E-17            | 1.57E-17                            | 1.57E-17                                                     | 2.05E-17        | 4.07E+07                                                          | Result below MDA          | Result below MDA                                          |
| Uranium-234 / 1300-562-1MA1 QTR2 2011 | 06/29/11 00:00 | 03/30/11 - 06/29/11 | 1.63E-16            | 4.62E-17                            | 4.76E-17                                                     | 1.10E-17        | 3.97E+07                                                          | 6.48E-09                  | 0.005%                                                    |
| Uranium-235 / 1300-562-1MA1 QTR1 2011 | 03/30/11 09:50 | 12/29/10 - 03/30/11 | 1.27E-17            | 1.48E-17                            | 1.48E-17                                                     | 1.12E-17        | 4.07E+07                                                          | 5.18E-10                  | 0.0004%                                                   |
| Uranium-235 / 1300-562-1MA1 QTR2 2011 | 06/29/11 00:00 | 03/30/11 - 06/29/11 | 1.33E-17            | 1.35E-17                            | 1.36E-17                                                     | 1.77E-17        | 3.97E+07                                                          | Result below MDA          | Result below MDA                                          |
| Uranium-238 / 1300-562-1MA1 QTR1 2011 | 03/30/11 09:50 | 12/29/10 - 03/30/11 | 9.11E-18            | 1.20E-17                            | 1.21E-17                                                     | 1.84E-17        | 4.07E+07                                                          | Result below MDA          | Result below MDA                                          |
| Uranium-238 / 1300-562-1MA1 QTR2 2011 | 06/29/11 00:00 | 03/30/11 - 06/29/11 | 1.62E-16            | 4.60E-17                            | 4.74E-17                                                     | 1.28E-17        | 3.97E+07                                                          | 6.43E-09                  | 0.005%                                                    |

**NOTES:**

1. uCi/mL = microCuries per milliliter.
2. m<sup>3</sup> = cubic meters.
3. MDA = minimum detectable activity.
4. Radionuclides analyzed using method EML U-02 Modified by Eberline Services of Oak Ridge, TN.
5. All detected activity values were less than the facility-required lower level of detection of 1.0E-14 uCi/mL for gaseous effluent samples (UUSA, 2011).

**TABLE 4**  
**SEPARATION BUILDING MODULE-1001 (SBM-1001)**  
**PUMPED EXTRACT GASEOUS EFFLUENT VENT SYSTEM - GROSS ALPHA**  
 URENCO USA  
 Lea County, New Mexico

| Lea County, New Mexico |                |                     | Gross Alpha (uCi/mL) |                      |                                         |                 | Total Vent System Flow (m³) | Quantity Released (Ci) |
|------------------------|----------------|---------------------|----------------------|----------------------|-----------------------------------------|-----------------|-----------------------------|------------------------|
| Sample ID              | Sample Date    | Sample Period       | Gross Alpha Results  | Counting Uncertainty | Combined Standard Uncertainty (2-sigma) | Gross Alpha MDA |                             |                        |
| 1001-562-1MA1          |                |                     |                      |                      |                                         |                 |                             |                        |
| 1001-562-1MA1 110105   | 01/05/11 09:20 | 12/29/10 - 01/05/11 | 2.22E-16             | 1.95E-16             | 1.96E-16                                | 1.33E-16        | 1.06E+05                    | 2.35E-11               |
| 1001-562-1MA1 110112   | 01/12/11 11:22 | 01/05/11 - 01/12/11 | 0.00E+00             | 3.01E-16             | 3.01E-16                                | 7.53E-16        | 1.08E+05                    | Result below MDA       |
| 1001-562-1MA1 110119   | 01/19/11 11:00 | 01/12/11 - 01/19/11 | 2.50E-16             | 3.05E-16             | 3.06E-16                                | 5.99E-16        | 1.08E+05                    | Result below MDA       |
| 1001-562-1MA1 110126   | 01/26/11 09:37 | 01/19/11 - 01/26/11 | -7.21E-16            | 4.33E-16             | 4.40E-16                                | 1.28E-15        | 1.08E+05                    | Result below MDA       |
| 1001-562-1MA1 110202   | 02/02/11 13:36 | 01/26/11 - 02/02/11 | 4.33E-17             | 2.55E-16             | 2.55E-16                                | 6.23E-16        | 1.11E+05                    | Result below MDA       |
| 1001-562-1MA1 110209   | 02/09/11 12:00 | 02/02/11 - 02/09/11 | 9.39E-17             | 1.30E-16             | 1.31E-16                                | 1.41E-16        | 1.07E+05                    | Result below MDA       |
| 1001-562-1MA1 110216   | 02/16/11 07:39 | 02/09/11 - 02/16/11 | 1.89E-16             | 2.62E-16             | 2.63E-16                                | 5.23E-16        | 1.05E+05                    | Result below MDA       |
| 1001-562-1MA1 110223   | 02/23/11 08:41 | 02/16/11 - 02/23/11 | -3.80E-16            | 4.17E-16             | 4.19E-16                                | 1.16E-15        | 1.07E+05                    | Result below MDA       |
| 1001-562-1MA1 110302   | 03/02/11 09:00 | 02/23/11 - 03/02/11 | 4.54E-17             | 8.90E-17             | 8.92E-17                                | 1.36E-16        | 1.07E+05                    | Result below MDA       |
| 1001-562-1MA1 110309   | 03/09/11 11:29 | 03/02/11 - 03/09/11 | -1.79E-16            | 3.04E-16             | 3.04E-16                                | 8.55E-16        | 1.08E+05                    | Result below MDA       |
| 1001-562-1MA1 110316   | 03/16/11 10:53 | 03/09/11 - 03/16/11 | -9.63E-17            | 2.98E-16             | 2.99E-16                                | 8.17E-16        | 1.06E+05                    | Result below MDA       |
| 1001-562-1MA1 110323   | 03/23/11 08:23 | 03/16/11 - 03/23/11 | 1.40E-16             | 3.03E-16             | 3.04E-16                                | 6.72E-16        | 1.05E+05                    | Result below MDA       |
| 1001-562-1MA1 110330   | 03/30/11 08:57 | 03/23/11 - 03/30/11 | 1.32E-16             | 1.49E-16             | 1.50E-16                                | 1.32E-16        | 1.06E+05                    | 1.40E-11               |
| 1001-562-1MA1 110406   | 04/06/11 09:08 | 03/30/11 - 04/06/11 | -6.94E-16            | 3.74E-16             | 3.81E-16                                | 1.19E-15        | 1.07E+05                    | Result below MDA       |
| 1001-562-1MA1 110413   | 04/13/11 14:45 | 04/06/11 - 04/13/11 | -1.70E-16            | 3.32E-16             | 3.33E-16                                | 8.91E-16        | 1.12E+05                    | Result below MDA       |
| 1001-562-1MA1 110420   | 04/20/11 13:19 | 04/13/11 - 04/20/11 | 1.32E-16             | 2.87E-16             | 2.87E-16                                | 6.35E-16        | 1.07E+05                    | Result below MDA       |
| 1001-562-1MA1 110427   | 04/27/11 08:56 | 04/20/11 - 04/27/11 | -9.05E-17            | 2.17E-16             | 2.17E-16                                | 6.51E-16        | 1.06E+05                    | Result below MDA       |
| 1001-562-1MA1 110504   | 05/04/11 09:03 | 04/27/11 - 05/04/11 | -5.92E-16            | 3.89E-16             | 3.94E-16                                | 1.15E-15        | 1.09E+05                    | Result below MDA       |
| 1001-562-1MA1 110511   | 05/11/11 09:37 | 05/04/11 - 05/11/11 | -1.38E-16            | 3.25E-16             | 3.25E-16                                | 8.79E-16        | 1.08E+05                    | Result below MDA       |
| 1001-562-1MA1 110518   | 05/18/11 08:33 | 05/11/11 - 05/18/11 | 1.79E-16             | 3.04E-16             | 3.05E-16                                | 6.46E-16        | 1.09E+05                    | Result below MDA       |
| 1001-562-1MA1 110525   | 05/25/11 10:16 | 05/18/11 - 05/25/11 | -1.37E-16            | 2.00E-16             | 2.00E-16                                | 6.56E-16        | 1.07E+05                    | Result below MDA       |
| 1001-562-1MA1 110601   | 06/01/11 10:17 | 05/25/11 - 06/01/11 | 2.30E-16             | 2.70E-16             | 2.71E-16                                | 5.08E-16        | 1.09E+05                    | Result below MDA       |
| 1001-562-1MA1 110608   | 06/08/11 09:10 | 06/01/11 - 06/08/11 | 1.76E-16             | 2.43E-16             | 2.44E-16                                | 4.85E-16        | 1.10E+05                    | Result below MDA       |
| 1001-562-1MA1 110615   | 06/15/11 08:52 | 06/08/11 - 06/15/11 | -2.80E-16            | 2.89E-16             | 2.91E-16                                | 8.92E-16        | 1.09E+05                    | Result below MDA       |
| 1001-562-1MA1 110622   | 06/22/11 09:58 | 06/15/11 - 06/22/11 | -4.43E-17            | 3.37E-16             | 3.37E-16                                | 8.48E-16        | 1.10E+05                    | Result below MDA       |
| 1001-562-1MA1 110629   | 06/29/11 08:37 | 06/22/11 - 06/29/11 | -4.05E-16            | 3.85E-16             | 3.87E-16                                | 1.10E-15        | 1.07E+05                    | Result below MDA       |

**TABLE 4**  
**SEPARATION BUILDING MODULE-1001 (SBM-1001)**  
**PUMPED EXTRACT GASEOUS EFFLUENT VENT SYSTEM - GROSS ALPHA**  
 URENCO USA  
 Lea County, New Mexico

| Lea County, New Mexico |                |                     | Gross Alpha (uCi/mL) |                      |                                         |                 | Total Vent System Flow (m³) | Quantity Released (Ci) |
|------------------------|----------------|---------------------|----------------------|----------------------|-----------------------------------------|-----------------|-----------------------------|------------------------|
| Sample ID              | Sample Date    | Sample Period       | Gross Alpha Results  | Counting Uncertainty | Combined Standard Uncertainty (2-sigma) | Gross Alpha MDA |                             |                        |
| 1001-562-1MA2          |                |                     |                      |                      |                                         |                 |                             |                        |
| 1001-562-1MA2 110105   | 01/05/11 09:12 | 12/29/10 - 01/05/11 | 1.24E-16             | 2.15E-16             | 2.16E-16                                | 4.59E-16        | 1.11E+05                    | Result below MDA       |
| 1001-562-1MA2 110112   | 01/12/11 11:07 | 01/05/11 - 01/12/11 | 9.11E-17             | 1.26E-16             | 1.27E-16                                | 1.37E-16        | 1.12E+05                    | Result below MDA       |
| 1001-562-1MA2 110119   | 01/19/11 10:57 | 01/12/11 - 01/19/11 | -1.49E-16            | 2.53E-16             | 2.53E-16                                | 7.11E-16        | 1.11E+05                    | Result below MDA       |
| 1001-562-1MA2 110126   | 01/26/11 09:33 | 01/19/11 - 01/26/11 | -3.25E-16            | 2.60E-16             | 2.63E-16                                | 9.19E-16        | 1.12E+05                    | Result below MDA       |
| 1001-562-1MA2 110202   | 02/02/11 13:33 | 01/26/11 - 02/02/11 | -2.00E-16            | 1.96E-16             | 1.97E-16                                | 7.20E-16        | 1.15E+05                    | Result below MDA       |
| 1001-562-1MA2 110209   | 02/09/11 12:03 | 02/02/11 - 02/09/11 | 5.14E-16             | 3.36E-16             | 3.41E-16                                | 1.71E-16        | 1.12E+05                    | 5.74E-11               |
| 1001-562-1MA2 110216   | 02/16/11 07:40 | 02/09/11 - 02/16/11 | 9.49E-17             | 2.94E-16             | 2.94E-16                                | 6.83E-16        | 1.10E+05                    | Result below MDA       |
| 1001-562-1MA2 110223   | 02/23/11 08:40 | 02/16/11 - 02/23/11 | -1.49E-16            | 4.02E-16             | 4.02E-16                                | 1.05E-15        | 1.12E+05                    | Result below MDA       |
| 1001-562-1MA2 110302   | 03/02/11 08:58 | 02/23/11 - 03/02/11 | -1.45E-16            | 2.12E-16             | 2.13E-16                                | 6.97E-16        | 1.11E+05                    | Result below MDA       |
| 1001-562-1MA2 110309   | 03/09/11 11:28 | 03/02/11 - 03/09/11 | 4.34E-17             | 1.90E-16             | 1.90E-16                                | 4.80E-16        | 1.12E+05                    | Result below MDA       |
| 1001-562-1MA2 110316   | 03/16/11 10:50 | 03/09/11 - 03/16/11 | -6.22E-16            | 4.09E-16             | 4.14E-16                                | 1.23E-15        | 1.11E+05                    | Result below MDA       |
| 1001-562-1MA2 110323   | 03/23/11 08:21 | 03/16/11 - 03/23/11 | -9.32E-17            | 2.24E-16             | 2.24E-16                                | 6.71E-16        | 1.10E+05                    | Result below MDA       |
| 1001-562-1MA2 110330   | 03/30/11 08:58 | 03/23/11 - 03/30/11 | -2.64E-16            | 3.65E-16             | 3.67E-16                                | 9.99E-16        | 1.11E+05                    | Result below MDA       |
| 1001-562-1MA2 110406   | 04/06/11 09:06 | 03/30/11 - 04/06/11 | 0.00E+00             | 2.52E-16             | 2.52E-16                                | 6.53E-16        | 1.12E+05                    | Result below MDA       |
| 1001-562-1MA2 110413   | 04/13/11 14:44 | 04/06/11 - 04/13/11 | -9.03E-17            | 3.31E-16             | 3.31E-16                                | 8.64E-16        | 1.18E+05                    | Result below MDA       |
| 1001-562-1MA2 110420   | 04/20/11 13:17 | 04/13/11 - 04/20/11 | -4.74E-16            | 3.48E-16             | 3.52E-16                                | 1.05E-15        | 1.12E+05                    | Result below MDA       |
| 1001-562-1MA2 110427   | 04/27/11 08:58 | 04/20/11 - 04/27/11 | -3.74E-16            | 3.67E-16             | 3.69E-16                                | 1.06E-15        | 1.10E+05                    | Result below MDA       |
| 1001-562-1MA2 110504   | 05/04/11 09:01 | 04/27/11 - 05/04/11 | -4.73E-17            | 1.60E-16             | 1.61E-16                                | 5.23E-16        | 1.12E+05                    | Result below MDA       |
| 1001-562-1MA2 110511   | 05/11/11 09:38 | 05/04/11 - 05/11/11 | -2.25E-16            | 3.42E-16             | 3.43E-16                                | 9.46E-16        | 1.11E+05                    | Result below MDA       |
| 1001-562-1MA2 110518   | 05/18/11 08:32 | 05/11/11 - 05/18/11 | 9.69E-16             | 4.79E-16             | 4.91E-16                                | 5.64E-16        | 1.06E+05                    | 1.03E-10               |
| 1001-562-1MA2 110525   | 05/25/11 10:15 | 05/18/11 - 05/25/11 | -8.84E-17            | 3.24E-16             | 3.24E-16                                | 8.45E-16        | 1.11E+05                    | Result below MDA       |
| 1001-562-1MA2 110601   | 06/01/11 10:14 | 05/25/11 - 06/01/11 | -3.94E-16            | 3.74E-16             | 3.77E-16                                | 1.07E-15        | 1.14E+05                    | Result below MDA       |
| 1001-562-1MA2 110608   | 06/08/11 12:50 | 06/01/11 - 06/08/11 | 4.27E-17             | 2.51E-16             | 2.51E-16                                | 6.14E-16        | 1.17E+05                    | Result below MDA       |
| 1001-562-1MA2 110615   | 06/15/11 08:50 | 06/08/11 - 06/15/11 | -8.98E-17            | 3.29E-16             | 3.29E-16                                | 8.58E-16        | 1.11E+05                    | Result below MDA       |
| 1001-562-1MA2 110622   | 06/22/11 09:55 | 06/15/11 - 06/22/11 | -8.52E-17            | 3.12E-16             | 3.13E-16                                | 8.14E-16        | 1.14E+05                    | Result below MDA       |
| 1001-562-1MA2 110629   | 06/29/11 08:39 | 06/22/11 - 06/29/11 | -3.15E-16            | 4.04E-16             | 4.06E-16                                | 1.10E-15        | 1.13E+05                    | Result below MDA       |

**NOTES:**

1. uCi/mL = microCuries per milliliter.
2. m<sup>3</sup> = cubic meters.
3. MDA = minimum detectable activity.
4. Gross alpha analyzed using method LANL MLR-100 Modified by Eberline Services of Oak Ridge, TN.
5. All detected activity values were less than the facility-required lower level of detection of 1.0E-14 uCi/mL for gaseous effluent samples (UUSA, 2011).

Haley &amp; Aldrich, Inc.

G:\37262\_URENCO\_USA\000\Reports\SARERR, Jan-Jun 2011\Tables\Tables 1 through 7\_Jan-Jun 2011.xlsx

August 2011

**TABLE 5**  
**SEPARATION BUILDING MODULE-1001 (SBM-1001)**  
**PUMPED EXTRACT GASEOUS EFFLUENT VENT SYSTEM - GROSS BETA**  
 URENCO USA  
 Lea County, New Mexico

| Lea County, New Mexico |                |                     | Gross Beta (uCi/mL) |                      |                                         |                | Total Vent System Flow (m³) | Quantity Released (Ci) |
|------------------------|----------------|---------------------|---------------------|----------------------|-----------------------------------------|----------------|-----------------------------|------------------------|
| Sample ID              | Sample Date    | Sample Period       | Gross Beta Results  | Counting Uncertainty | Combined Standard Uncertainty (2-sigma) | Gross Beta MDA |                             |                        |
| 1001-562-1MA1          |                |                     |                     |                      |                                         |                |                             |                        |
| 1001-562-1MA1 110105   | 01/05/11 09:20 | 12/29/10 - 01/05/11 | 3.75E-16            | 9.26E-16             | 9.27E-16                                | 1.94E-15       | 1.06E+05                    | Result below MDA       |
| 1001-562-1MA1 110112   | 01/12/11 11:22 | 01/05/11 - 01/12/11 | 4.87E-16            | 7.46E-16             | 7.49E-16                                | 1.54E-15       | 1.08E+05                    | Result below MDA       |
| 1001-562-1MA1 110119   | 01/19/11 11:00 | 01/12/11 - 01/19/11 | 2.25E-16            | 7.86E-16             | 7.87E-16                                | 1.66E-15       | 1.08E+05                    | Result below MDA       |
| 1001-562-1MA1 110126   | 01/26/11 09:37 | 01/19/11 - 01/26/11 | 2.39E-16            | 9.04E-16             | 9.05E-16                                | 1.91E-15       | 1.08E+05                    | Result below MDA       |
| 1001-562-1MA1 110202   | 02/02/11 13:36 | 01/26/11 - 02/02/11 | 3.04E-16            | 8.07E-16             | 8.08E-16                                | 1.70E-15       | 1.11E+05                    | Result below MDA       |
| 1001-562-1MA1 110209   | 02/09/11 12:00 | 02/02/11 - 02/09/11 | -3.13E-16           | 1.18E-15             | 1.18E-15                                | 2.54E-15       | 1.07E+05                    | Result below MDA       |
| 1001-562-1MA1 110216   | 02/16/11 07:39 | 02/09/11 - 02/16/11 | -4.13E-16           | 9.29E-16             | 9.31E-16                                | 2.04E-15       | 1.05E+05                    | Result below MDA       |
| 1001-562-1MA1 110223   | 02/23/11 08:41 | 02/16/11 - 02/23/11 | -2.98E-16           | 9.97E-16             | 9.98E-16                                | 2.16E-15       | 1.07E+05                    | Result below MDA       |
| 1001-562-1MA1 110302   | 03/02/11 09:00 | 02/23/11 - 03/02/11 | -5.59E-16           | 9.82E-16             | 9.85E-16                                | 2.16E-15       | 1.07E+05                    | Result below MDA       |
| 1001-562-1MA1 110309   | 03/09/11 11:29 | 03/02/11 - 03/09/11 | -2.07E-16           | 8.60E-16             | 8.61E-16                                | 1.87E-15       | 1.08E+05                    | Result below MDA       |
| 1001-562-1MA1 110316   | 03/16/11 10:53 | 03/09/11 - 03/16/11 | 1.00E-15            | 9.06E-16             | 9.16E-16                                | 1.82E-15       | 1.06E+05                    | Result below MDA       |
| 1001-562-1MA1 110323   | 03/23/11 08:23 | 03/16/11 - 03/23/11 | 3.01E-16            | 8.23E-16             | 8.24E-16                                | 1.73E-15       | 1.05E+05                    | Result below MDA       |
| 1001-562-1MA1 110330   | 03/30/11 08:57 | 03/23/11 - 03/30/11 | -1.31E-16           | 8.45E-16             | 8.46E-16                                | 1.83E-15       | 1.06E+05                    | Result below MDA       |
| 1001-562-1MA1 110406   | 04/06/11 09:08 | 03/30/11 - 04/06/11 | -2.67E-16           | 9.03E-16             | 9.03E-16                                | 1.97E-15       | 1.07E+05                    | Result below MDA       |
| 1001-562-1MA1 110413   | 04/13/11 14:45 | 04/06/11 - 04/13/11 | 4.72E-16            | 7.89E-16             | 7.92E-16                                | 1.64E-15       | 1.12E+05                    | Result below MDA       |
| 1001-562-1MA1 110420   | 04/20/11 13:19 | 04/13/11 - 04/20/11 | -3.57E-16           | 8.63E-16             | 8.65E-16                                | 1.89E-15       | 1.07E+05                    | Result below MDA       |
| 1001-562-1MA1 110427   | 04/27/11 08:56 | 04/20/11 - 04/27/11 | -1.62E-16           | 9.06E-16             | 9.06E-16                                | 1.96E-15       | 1.06E+05                    | Result below MDA       |
| 1001-562-1MA1 110504   | 05/04/11 09:03 | 04/27/11 - 05/04/11 | 2.71E-15            | 9.66E-16             | 1.04E-15                                | 1.76E-15       | 1.09E+05                    | 2.95E-10               |
| 1001-562-1MA1 110511   | 05/11/11 09:37 | 05/04/11 - 05/11/11 | 1.37E-16            | 9.44E-16             | 9.44E-16                                | 2.01E-15       | 1.08E+05                    | Result below MDA       |
| 1001-562-1MA1 110518   | 05/18/11 08:33 | 05/11/11 - 05/18/11 | -1.01E-15           | 8.75E-16             | 8.86E-16                                | 2.01E-15       | 1.09E+05                    | Result below MDA       |
| 1001-562-1MA1 110525   | 05/25/11 10:16 | 05/18/11 - 05/25/11 | 7.99E-16            | 9.49E-16             | 9.55E-16                                | 1.94E-15       | 1.07E+05                    | Result below MDA       |
| 1001-562-1MA1 110601   | 06/01/11 10:17 | 05/25/11 - 06/01/11 | -5.78E-16           | 8.95E-16             | 8.98E-16                                | 1.98E-15       | 1.09E+05                    | Result below MDA       |
| 1001-562-1MA1 110608   | 06/08/11 09:10 | 06/01/11 - 06/08/11 | -1.03E-16           | 8.34E-16             | 8.34E-16                                | 1.80E-15       | 1.10E+05                    | Result below MDA       |
| 1001-562-1MA1 110615   | 06/15/11 08:52 | 06/08/11 - 06/15/11 | -2.78E-16           | 1.00E-15             | 1.00E-15                                | 2.17E-15       | 1.09E+05                    | Result below MDA       |
| 1001-562-1MA1 110622   | 06/22/11 09:58 | 06/15/11 - 06/22/11 | 3.35E-16            | 7.83E-16             | 7.85E-16                                | 1.64E-15       | 1.10E+05                    | Result below MDA       |
| 1001-562-1MA1 110629   | 06/29/11 08:37 | 06/22/11 - 06/29/11 | -4.02E-16           | 9.11E-16             | 9.13E-16                                | 2.00E-15       | 1.07E+05                    | Result below MDA       |

**TABLE 5**  
**SEPARATION BUILDING MODULE-1001 (SBM-1001)**  
**PUMPED EXTRACT GASEOUS EFFLUENT VENT SYSTEM - GROSS BETA**  
 URENCO USA  
 Lea County, New Mexico

| Lea County, New Mexico |                |                     | Gross Beta (uCi/mL) |                      |                                         |                | Total Vent System Flow (m <sup>3</sup> ) | Quantity Released (Ci) |
|------------------------|----------------|---------------------|---------------------|----------------------|-----------------------------------------|----------------|------------------------------------------|------------------------|
| Sample ID              | Sample Date    | Sample Period       | Gross Beta Results  | Counting Uncertainty | Combined Standard Uncertainty (2-sigma) | Gross Beta MDA |                                          |                        |
| 1001-562-1MA2          |                |                     |                     |                      |                                         |                |                                          |                        |
| 1001-562-1MA2 110105   | 01/05/11 09:12 | 12/29/10 - 01/05/11 | -7.66E-16           | 8.07E-16             | 8.14E-16                                | 1.82E-15       | 1.11E+05                                 | Result below MDA       |
| 1001-562-1MA2 110112   | 01/12/11 11:07 | 01/05/11 - 01/12/11 | -4.80E-16           | 9.90E-16             | 9.92E-16                                | 2.17E-15       | 1.12E+05                                 | Result below MDA       |
| 1001-562-1MA2 110119   | 01/19/11 10:57 | 01/12/11 - 01/19/11 | -4.95E-16           | 6.96E-16             | 7.00E-16                                | 1.56E-15       | 1.11E+05                                 | Result below MDA       |
| 1001-562-1MA2 110126   | 01/26/11 09:33 | 01/19/11 - 01/26/11 | 1.07E-15            | 1.02E-15             | 1.03E-15                                | 2.05E-15       | 1.12E+05                                 | Result below MDA       |
| 1001-562-1MA2 110202   | 02/02/11 13:33 | 01/26/11 - 02/02/11 | 7.05E-16            | 9.07E-16             | 9.12E-16                                | 1.86E-15       | 1.15E+05                                 | Result below MDA       |
| 1001-562-1MA2 110209   | 02/09/11 12:03 | 02/02/11 - 02/09/11 | 6.13E-16            | 1.14E-15             | 1.15E-15                                | 2.38E-15       | 1.12E+05                                 | Result below MDA       |
| 1001-562-1MA2 110216   | 02/16/11 07:40 | 02/09/11 - 02/16/11 | 2.98E-16            | 8.77E-16             | 8.78E-16                                | 1.85E-15       | 1.10E+05                                 | Result below MDA       |
| 1001-562-1MA2 110223   | 02/23/11 08:40 | 02/16/11 - 02/23/11 | 1.03E-14            | 1.45E-15             | 2.03E-15                                | 2.14E-15       | 1.12E+05                                 | 1.15E-09               |
| 1001-562-1MA2 110302   | 03/02/11 08:58 | 02/23/11 - 03/02/11 | 2.49E-16            | 8.56E-16             | 8.57E-16                                | 1.81E-15       | 1.11E+05                                 | Result below MDA       |
| 1001-562-1MA2 110309   | 03/09/11 11:28 | 03/02/11 - 03/09/11 | 1.02E-16            | 8.44E-16             | 8.44E-16                                | 1.80E-15       | 1.12E+05                                 | Result below MDA       |
| 1001-562-1MA2 110316   | 03/16/11 10:50 | 03/09/11 - 03/16/11 | -8.84E-16           | 8.68E-16             | 8.76E-16                                | 1.98E-15       | 1.11E+05                                 | Result below MDA       |
| 1001-562-1MA2 110323   | 03/23/11 08:21 | 03/16/11 - 03/23/11 | -4.06E-16           | 8.50E-16             | 8.52E-16                                | 1.88E-15       | 1.10E+05                                 | Result below MDA       |
| 1001-562-1MA2 110330   | 03/30/11 08:58 | 03/23/11 - 03/30/11 | -1.05E-16           | 8.58E-16             | 8.58E-16                                | 1.85E-15       | 1.11E+05                                 | Result below MDA       |
| 1001-562-1MA2 110406   | 04/06/11 09:06 | 03/30/11 - 04/06/11 | 2.65E-16            | 9.16E-16             | 9.17E-16                                | 1.93E-15       | 1.12E+05                                 | Result below MDA       |
| 1001-562-1MA2 110413   | 04/13/11 14:44 | 04/06/11 - 04/13/11 | 5.23E-16            | 9.69E-16             | 9.72E-16                                | 2.02E-15       | 1.18E+05                                 | Result below MDA       |
| 1001-562-1MA2 110420   | 04/20/11 13:17 | 04/13/11 - 04/20/11 | 1.55E-16            | 9.44E-16             | 9.44E-16                                | 2.00E-15       | 1.12E+05                                 | Result below MDA       |
| 1001-562-1MA2 110427   | 04/27/11 08:58 | 04/20/11 - 04/27/11 | 1.19E-15            | 1.09E-15             | 1.10E-15                                | 2.19E-15       | 1.10E+05                                 | Result below MDA       |
| 1001-562-1MA2 110504   | 05/04/11 09:01 | 04/27/11 - 05/04/11 | -3.32E-16           | 8.94E-16             | 8.95E-16                                | 1.96E-15       | 1.12E+05                                 | Result below MDA       |
| 1001-562-1MA2 110511   | 05/11/11 09:38 | 05/04/11 - 05/11/11 | 6.28E-16            | 1.08E-15             | 1.09E-15                                | 2.25E-15       | 1.11E+05                                 | Result below MDA       |
| 1001-562-1MA2 110518   | 05/18/11 08:32 | 05/11/11 - 05/18/11 | 0.00E+00            | 1.01E-15             | 1.01E-15                                | 2.17E-15       | 1.06E+05                                 | Result below MDA       |
| 1001-562-1MA2 110525   | 05/25/11 10:15 | 05/18/11 - 05/25/11 | 7.70E-17            | 7.64E-16             | 7.64E-16                                | 1.64E-15       | 1.11E+05                                 | Result below MDA       |
| 1001-562-1MA2 110601   | 06/01/11 10:14 | 05/25/11 - 06/01/11 | -5.47E-16           | 8.77E-16             | 8.80E-16                                | 1.94E-15       | 1.14E+05                                 | Result below MDA       |
| 1001-562-1MA2 110608   | 06/08/11 12:50 | 06/01/11 - 06/08/11 | -4.82E-16           | 8.62E-16             | 8.64E-16                                | 1.91E-15       | 1.17E+05                                 | Result below MDA       |
| 1001-562-1MA2 110615   | 06/15/11 08:50 | 06/08/11 - 06/15/11 | 3.74E-16            | 9.35E-16             | 9.36E-16                                | 1.96E-15       | 1.11E+05                                 | Result below MDA       |
| 1001-562-1MA2 110622   | 06/22/11 09:55 | 06/15/11 - 06/22/11 | -4.95E-17           | 7.29E-16             | 7.29E-16                                | 1.58E-15       | 1.14E+05                                 | Result below MDA       |
| 1001-562-1MA2 110629   | 06/29/11 08:39 | 06/22/11 - 06/29/11 | -6.96E-16           | 8.94E-16             | 8.99E-16                                | 2.00E-15       | 1.13E+05                                 | Result below MDA       |

**NOTES:**

1. uCi/mL = microCuries per milliliter.
2. m<sup>3</sup> = cubic meters.
3. MDA = minimum detectable activity.
4. Gross beta analyzed using method LANL MLR-100 Modified by Eberline Services of Oak Ridge, TN.

**TABLE 6**  
**SEPARATION BUILDING MODULE-1001 (SBM-1001)**  
**PUMPED EXTRACT GASEOUS EFFLUENT VENT SYSTEM**  
**QUARTERLY FILTER COMPOSITE RESULTS - RADIONUCLIDES**  
**URENCO USA**  
**Lea County, New Mexico**

| Radionuclide / Sample ID              | Sample Date    | Sample Period       | Results (uCi/mL) | Counting Uncertainty | Combined Standard Uncertainty (2-sigma) | MDA (uCi/mL) | Total Flow (m <sup>3</sup> ) | Quantity Released (Ci) | % of Table 2 of Appendix B to 10 CFR Part 20 Values |
|---------------------------------------|----------------|---------------------|------------------|----------------------|-----------------------------------------|--------------|------------------------------|------------------------|-----------------------------------------------------|
| <b>1001-562-1MA1</b>                  |                |                     |                  |                      |                                         |              |                              |                        |                                                     |
| Uranium-234 / 1001-562-1MA1 QTR1 2011 | 03/30/11 09:50 | 12/29/10 - 03/30/11 | 1.03E-17         | 1.79E-17             | 1.79E-17                                | 3.33E-17     | 1.39E+06                     | Result below MDA       | Result below MDA                                    |
| Uranium-234 / 1001-562-1MA1 QTR2 2011 | 06/29/11 00:00 | 03/30/11 - 06/29/11 | 1.45E-16         | 7.49E-17             | 7.56E-17                                | 5.44E-17     | 1.41E+06                     | 2.05E-10               | 0.005%                                              |
| Uranium-235 / 1001-562-1MA1 QTR1 2011 | 03/30/11 09:50 | 12/29/10 - 03/30/11 | -1.30E-18        | 2.61E-18             | 2.61E-18                                | 3.50E-17     | 1.39E+06                     | Result below MDA       | Result below MDA                                    |
| Uranium-235 / 1001-562-1MA1 QTR2 2011 | 06/29/11 00:00 | 03/30/11 - 06/29/11 | 2.75E-17         | 3.65E-17             | 3.65E-17                                | 5.55E-17     | 1.41E+06                     | Result below MDA       | Result below MDA                                    |
| Uranium-238 / 1001-562-1MA1 QTR1 2011 | 03/30/11 09:50 | 12/29/10 - 03/30/11 | 1.98E-18         | 1.31E-17             | 1.31E-17                                | 4.01E-17     | 1.39E+06                     | Result below MDA       | Result below MDA                                    |
| Uranium-238 / 1001-562-1MA1 QTR2 2011 | 06/29/11 00:00 | 03/30/11 - 06/29/11 | 1.11E-16         | 6.51E-17             | 6.56E-17                                | 5.42E-17     | 1.41E+06                     | 1.57E-10               | 0.004%                                              |
| <b>1001-562-1MA2</b>                  |                |                     |                  |                      |                                         |              |                              |                        |                                                     |
| Uranium-234 / 1001-562-1MA2 QTR1 2011 | 03/30/11 08:58 | 12/29/10 - 03/30/11 | 1.63E-17         | 1.65E-17             | 1.65E-17                                | 2.16E-17     | 1.45E+06                     | Result below MDA       | Result below MDA                                    |
| Uranium-234 / 1001-562-1MA2 QTR2 2011 | 06/29/11 00:00 | 03/30/11 - 06/29/11 | 1.53E-16         | 4.98E-17             | 5.10E-17                                | 1.93E-17     | 1.46E+06                     | 2.24E-10               | 0.005%                                              |
| Uranium-235 / 1001-562-1MA2 QTR1 2011 | 03/30/11 08:58 | 12/29/10 - 03/30/11 | 2.60E-17         | 2.23E-17             | 2.23E-17                                | 2.04E-17     | 1.45E+06                     | 3.77E-11               | 0.0009%                                             |
| Uranium-235 / 1001-562-1MA2 QTR2 2011 | 06/29/11 00:00 | 03/30/11 - 06/29/11 | 1.59E-17         | 1.61E-17             | 1.61E-17                                | 1.05E-17     | 1.46E+06                     | 2.32E-11               | 0.0005%                                             |
| Uranium-238 / 1001-562-1MA2 QTR1 2011 | 03/30/11 08:58 | 12/29/10 - 03/30/11 | -6.13E-19        | 1.23E-18             | 1.23E-18                                | 1.65E-17     | 1.45E+06                     | Result below MDA       | Result below MDA                                    |
| Uranium-238 / 1001-562-1MA2 QTR2 2011 | 06/29/11 00:00 | 03/30/11 - 06/29/11 | 1.28E-16         | 4.51E-17             | 4.61E-17                                | 2.36E-17     | 1.46E+06                     | 1.87E-10               | 0.004%                                              |

**NOTES:**

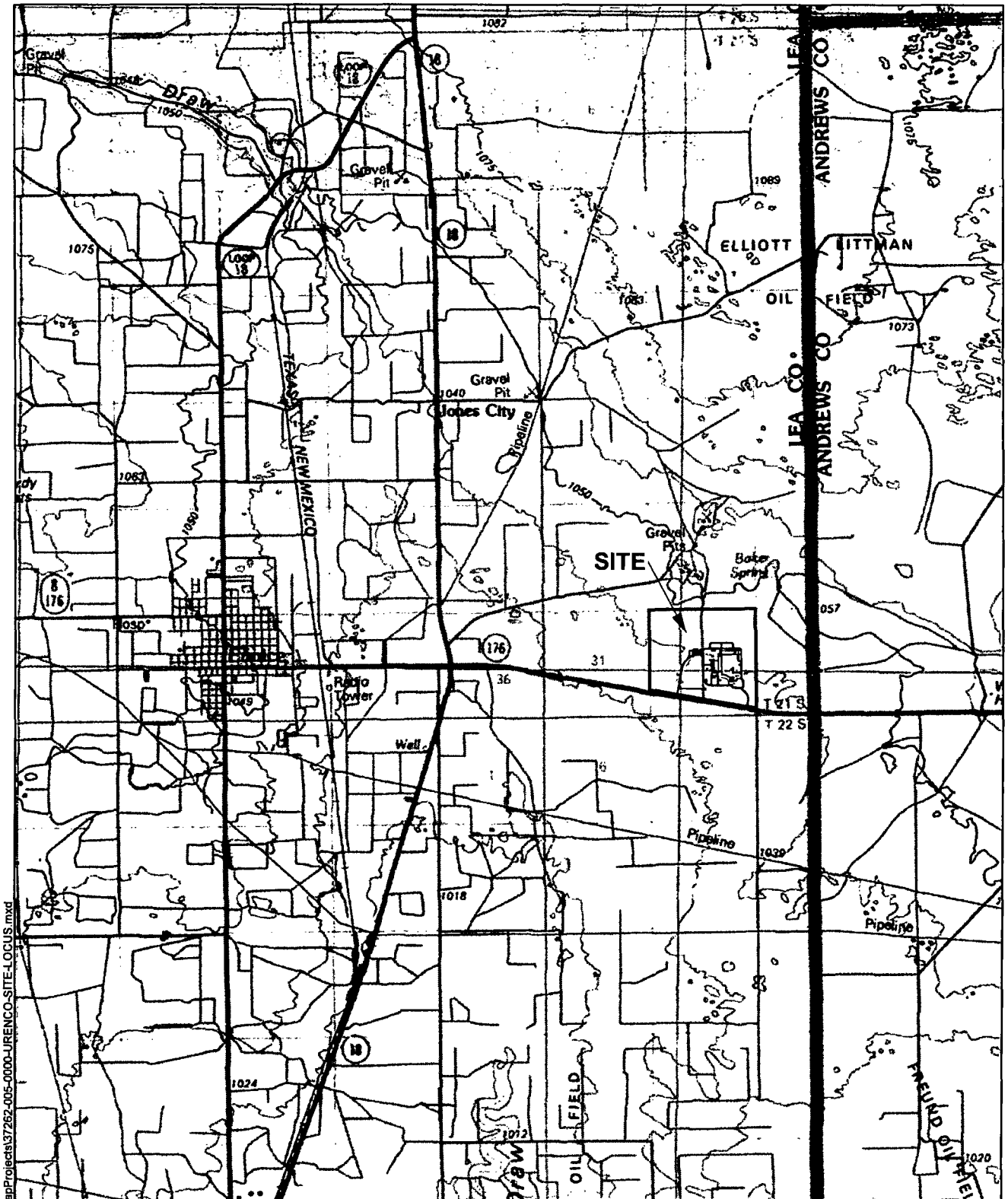
1. uCi/mL = microCuries per milliliter.
2. m<sup>3</sup> = cubic meters.
3. MDA = minimum detectable activity.
4. Radionuclides analyzed using method EML U-02 Modified by Eberline Services of Oak Ridge, TN.
5. All detected activity values were less than the facility-required lower level of detection of 1.0E-14 uCi/mL for gaseous effluent samples (UUSA, 2011).

**TABLE 7**  
**LIFT STATION 1 WASTEWATER EFFLUENT - RADIONUCLIDES**  
 URENCO USA  
 Lea County, New Mexico

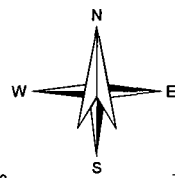
| Radionuclide                    | Sample Date    | Sample Period       | Total Time (days) | Results (uCi/mL) | Counting Uncertainty (uCi/mL) | Combined Standard Uncertainty (2-sigma) (uCi/mL) | MDA (uCi/mL) | Total Flow (gallons/day)* | Quantity Released (Ci) | % of Table 3 of Appendix B to 10 CFR Part 20 Values - Monthly Average Releases to Sewers |
|---------------------------------|----------------|---------------------|-------------------|------------------|-------------------------------|--------------------------------------------------|--------------|---------------------------|------------------------|------------------------------------------------------------------------------------------|
| <b>LIFT STATION 1 - Q1 2011</b> |                |                     |                   |                  |                               |                                                  |              |                           |                        |                                                                                          |
| Uranium - 234                   | 01/21/11 09:36 | 10/12/10 - 01/21/11 | 101               | 1.70E-09         | 1.78E-10                      | —                                                | 1.45E-11     | 13,000                    | 8.48E-06               | 0.06%                                                                                    |
| Uranium - 235                   | 01/21/11 09:36 | 10/12/10 - 01/21/11 | 101               | 5.39E-11         | 3.52E-11                      | —                                                | 1.80E-11     | 13,000                    | 2.69E-07               | 0.002%                                                                                   |
| Uranium - 238                   | 01/21/11 09:36 | 10/12/10 - 01/21/11 | 101               | 7.90E-10         | 1.22E-10                      | —                                                | 3.71E-11     | 13,000                    | 3.94E-06               | 0.03%                                                                                    |
| <b>LIFT STATION 1 - Q2 2011</b> |                |                     |                   |                  |                               |                                                  |              |                           |                        |                                                                                          |
| Uranium - 234                   | 04/12/11 11:58 | 01/21/11 - 04/12/11 | 81                | 1.10E-09         | 1.97E-10                      | 2.48E-10                                         | 9.76E-11     | 13,000                    | 4.39E-06               | 0.04%                                                                                    |
| Uranium - 235                   | 04/12/11 11:58 | 01/21/11 - 04/12/11 | 81                | 4.36E-11         | 4.27E-11                      | 4.32E-11                                         | 3.27E-11     | 13,000                    | 1.74E-07               | 0.001%                                                                                   |
| Uranium - 238                   | 04/12/11 11:58 | 01/21/11 - 04/12/11 | 81                | 6.53E-10         | 1.53E-10                      | 1.77E-10                                         | 8.45E-11     | 13,000                    | 2.61E-06               | 0.02%                                                                                    |

**NOTES:**

1. uCi/mL = microCuries per milliliter.
2. MDA = minimum detectable activity.
3. Radionuclides analyzed using method EML U-02 Modified by GEL Laboratories, LLC of Charleston, SC.
4. All detected activity values were less than the facility-required lower level detection limit of 3.0E-9 uCi/mL for liquid effluent samples (UUSA, 2011).
5. \* = Table 3.4-4 "Anticipated Normal Plant Water Consumption" lists "Total Personnel Water Use" as approximately 13,000 gallons per day (UUSA, 2011).
6. — = Combined Standard Uncertainty (2-sigma) not reported during Quarter 1, 2011.



SITE COORDINATES: 32.436181 103.0821



0 7000  
SCALE IN FEET

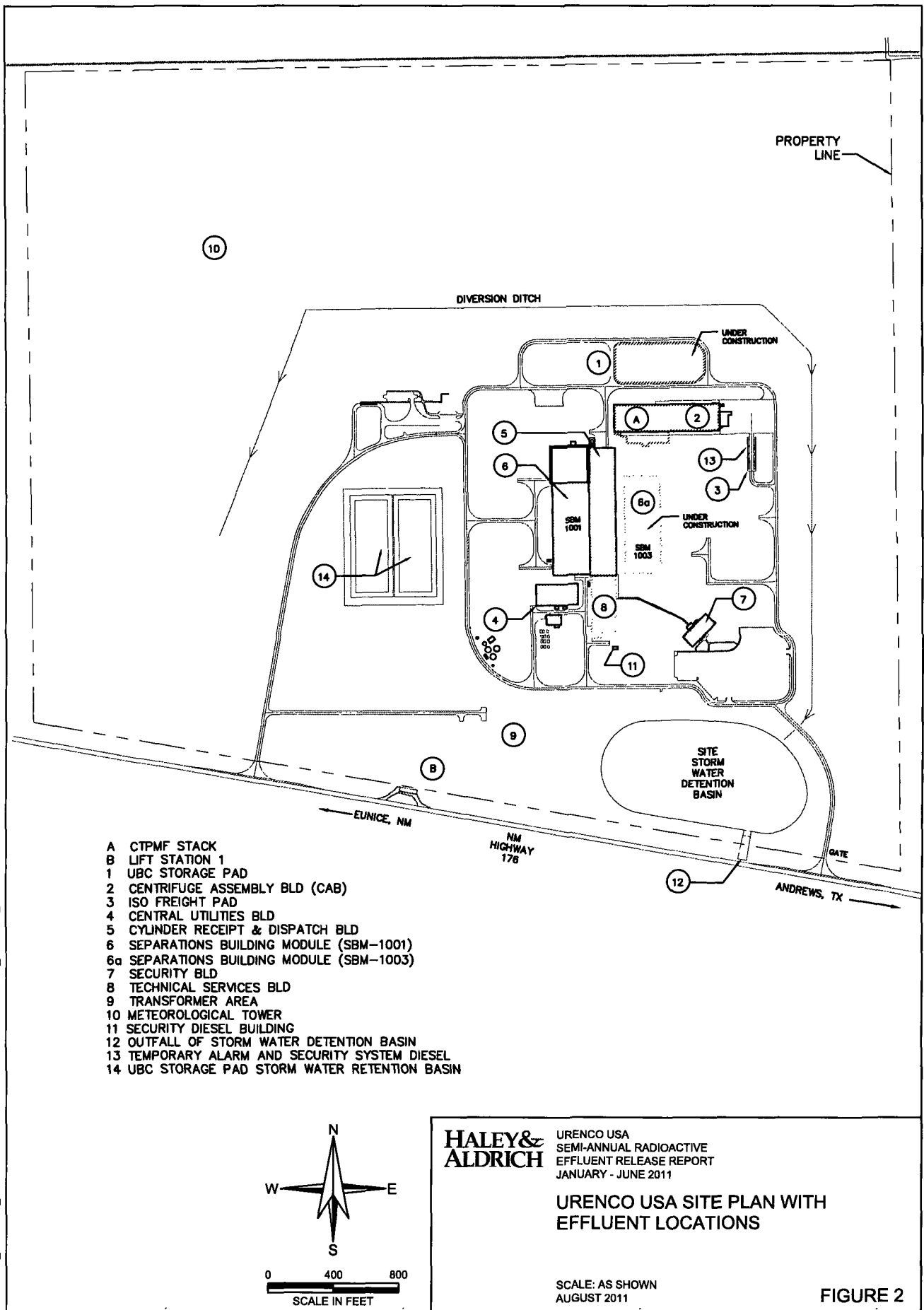
**HALEY & ALDRICH**

URENCO USA  
SEMI-ANNUAL RADIOACTIVE  
EFFLUENT RELEASE REPORT  
EUNICE, NEW MEXICO

### SITE LOCATION MAP

SCALE: AS SHOWN  
AUGUST 2011

FIGURE 1



**APPENDIX A**  
**Lab Data Sheets**

| <b>Eberline Analytical</b><br><b>Final Report of Analysis</b> |             |                      | Report To:       |              |               |             |          |             | Work Order Details:   |               |          |          |          |              |
|---------------------------------------------------------------|-------------|----------------------|------------------|--------------|---------------|-------------|----------|-------------|-----------------------|---------------|----------|----------|----------|--------------|
|                                                               |             |                      | Debra Edwards    |              |               |             |          |             | SDG:                  | 11-04056      |          |          |          |              |
|                                                               |             |                      | Urenco USA       |              |               |             |          |             | Purchase Order:       | LES-GSA-3080  |          |          |          |              |
|                                                               |             |                      | 275 Hwy 176      |              |               |             |          |             | Analysis Category:    | ENVIRONMENTAL |          |          |          |              |
|                                                               |             |                      | Eunice, NM 88231 |              |               |             |          |             | Sample Matrix:        | AF            |          |          |          |              |
| Lab ID                                                        | Sample Type | Client ID            | Sample Date      | Receipt Date | Analysis Date | Volume (ml) | Batch ID | Analyte     | Method                | Result        | CU       | CSU      | MDA      | Report Units |
| 11-04056-01                                                   | LCS         | KNOWN                | 04/12/11 00:00   | 4/8/2011     | 4/13/2011     |             | 11-04056 | Gross Alpha | LANL MLR-100 Modified | 3.14E-04      | 1.35E-05 |          |          | uCi/ml       |
| 11-04056-01                                                   | LCS         | SPIKE                | 04/12/11 00:00   | 4/8/2011     | 4/13/2011     |             | 11-04056 | Gross Alpha | LANL MLR-100 Modified | 3.00E-04      | 7.85E-06 | 3.36E-05 | 3.76E-07 | uCi/ml       |
| 11-04056-02                                                   | MBL         | BLANK                | 04/12/11 00:00   | 4/8/2011     | 4/13/2011     |             | 11-04056 | Gross Alpha | LANL MLR-100 Modified | 0.00E+00      | 2.53E-16 | 2.53E-16 | 6.56E-16 | uCi/ml       |
| 11-04056-03                                                   | DUP         | 1001-562-1MA2 110105 | 01/05/11 09:12   | 4/8/2011     | 4/13/2011     | 3.21E+08    | 11-04056 | Gross Alpha | LANL MLR-100 Modified | -3.21E-16     | 3.15E-16 | 3.16E-16 | 9.12E-16 | uCi/ml       |
| 11-04056-04                                                   | DO          | 1001-562-1MA2 110105 | 01/05/11 09:12   | 4/8/2011     | 4/13/2011     | 3.21E+08    | 11-04056 | Gross Alpha | LANL MLR-100 Modified | 1.24E-16      | 2.15E-16 | 2.16E-16 | 4.59E-16 | uCi/ml       |
| 11-04056-05                                                   | TRG         | 1001-562-1MA2 110112 | 01/12/11 11:07   | 4/8/2011     | 4/13/2011     | 2.92E+08    | 11-04056 | Gross Alpha | LANL MLR-100 Modified | 9.11E-17      | 1.26E-16 | 1.27E-16 | 1.37E-16 | uCi/ml       |
| 11-04056-06                                                   | TRG         | 1001-562-1MA2 110119 | 01/19/11 10:57   | 4/8/2011     | 4/13/2011     | 3.56E+08    | 11-04056 | Gross Alpha | LANL MLR-100 Modified | -1.49E-16     | 2.53E-16 | 2.53E-16 | 7.11E-16 | uCi/ml       |
| 11-04056-07                                                   | TRG         | 1001-562-1MA2 110126 | 01/26/11 09:33   | 4/8/2011     | 4/13/2011     | 2.47E+08    | 11-04056 | Gross Alpha | LANL MLR-100 Modified | -3.25E-16     | 2.60E-16 | 2.63E-16 | 9.19E-16 | uCi/ml       |
| 11-04056-08                                                   | TRG         | 1001-562-1MA2 110202 | 02/02/11 13:33   | 4/8/2011     | 4/13/2011     | 2.64E+08    | 11-04056 | Gross Alpha | LANL MLR-100 Modified | -2.00E-16     | 1.96E-16 | 1.97E-16 | 7.20E-16 | uCi/ml       |
| 11-04056-09                                                   | TRG         | 1001-562-1MA2 110209 | 02/09/11 12:03   | 4/8/2011     | 4/13/2011     | 2.31E+08    | 11-04056 | Gross Alpha | LANL MLR-100 Modified | 5.14E-16      | 3.36E-16 | 3.41E-16 | 1.71E-16 | uCi/ml       |
| 11-04056-10                                                   | TRG         | 1001-562-1MA2 110216 | 02/16/11 07:40   | 4/8/2011     | 4/13/2011     | 2.77E+08    | 11-04056 | Gross Alpha | LANL MLR-100 Modified | 9.49E-17      | 2.94E-16 | 2.94E-16 | 6.83E-16 | uCi/ml       |
| 11-04056-11                                                   | TRG         | 1001-562-1MA2 110223 | 02/23/11 08:40   | 4/8/2011     | 4/13/2011     | 2.84E+08    | 11-04056 | Gross Alpha | LANL MLR-100 Modified | -1.49E-16     | 4.02E-16 | 4.02E-16 | 1.05E-15 | uCi/ml       |
| 11-04056-12                                                   | TRG         | 1001-562-1MA2 110302 | 03/02/11 08:58   | 4/8/2011     | 4/13/2011     | 2.79E+08    | 11-04056 | Gross Alpha | LANL MLR-100 Modified | -1.45E-16     | 2.12E-16 | 2.13E-16 | 6.97E-16 | uCi/ml       |
| 11-04056-13                                                   | TRG         | 1001-562-1MA2 110309 | 03/09/11 11:28   | 4/8/2011     | 4/13/2011     | 2.96E+08    | 11-04056 | Gross Alpha | LANL MLR-100 Modified | 4.34E-17      | 1.90E-16 | 1.90E-16 | 4.80E-16 | uCi/ml       |
| 11-04056-14                                                   | TRG         | 1001-562-1MA2 110316 | 03/16/11 10:50   | 4/8/2011     | 4/13/2011     | 2.71E+08    | 11-04056 | Gross Alpha | LANL MLR-100 Modified | -6.22E-16     | 4.09E-16 | 4.14E-16 | 1.23E-15 | uCi/ml       |
| 11-04056-15                                                   | TRG         | 1001-562-1MA2 110323 | 03/23/11 08:21   | 4/8/2011     | 4/13/2011     | 2.78E+08    | 11-04056 | Gross Alpha | LANL MLR-100 Modified | -9.32E-17     | 2.24E-16 | 2.24E-16 | 6.71E-16 | uCi/ml       |
| 11-04056-16                                                   | TRG         | 1001-562-1MA2 110330 | 03/30/11 08:58   | 4/8/2011     | 4/13/2011     | 2.93E+08    | 11-04056 | Gross Alpha | LANL MLR-100 Modified | -2.64E-16     | 3.65E-16 | 3.67E-16 | 9.99E-16 | uCi/ml       |
| 11-04056-01                                                   | LCS         | KNOWN                | 04/12/11 00:00   | 4/8/2011     | 4/13/2011     |             | 11-04056 | Gross Beta  | LANL MLR-100 Modified | 2.32E-04      | 6.96E-06 |          |          | uCi/ml       |
| 11-04056-01                                                   | LCS         | SPIKE                | 04/12/11 00:00   | 4/8/2011     | 4/13/2011     |             | 11-04056 | Gross Beta  | LANL MLR-100 Modified | 2.47E-04      | 5.96E-06 | 3.46E-05 | 8.02E-07 | uCi/ml       |
| 11-04056-02                                                   | MBL         | BLANK                | 04/12/11 00:00   | 4/8/2011     | 4/13/2011     |             | 11-04056 | Gross Beta  | LANL MLR-100 Modified | -2.65E-16     | 8.40E-16 | 8.41E-16 | 1.84E-15 | uCi/ml       |
| 11-04056-03                                                   | DUP         | 1001-562-1MA2 110105 | 01/05/11 09:12   | 4/8/2011     | 4/13/2011     | 3.21E+08    | 11-04056 | Gross Beta  | LANL MLR-100 Modified | -7.16E-17     | 7.84E-16 | 7.84E-16 | 1.69E-15 | uCi/ml       |
| 11-04056-04                                                   | DO          | 1001-562-1MA2 110105 | 01/05/11 09:12   | 4/8/2011     | 4/13/2011     | 3.21E+08    | 11-04056 | Gross Beta  | LANL MLR-100 Modified | -7.66E-16     | 8.07E-16 | 8.14E-16 | 1.82E-15 | uCi/ml       |
| 11-04056-05                                                   | TRG         | 1001-562-1MA2 110112 | 01/12/11 11:07   | 4/8/2011     | 4/13/2011     | 2.92E+08    | 11-04056 | Gross Beta  | LANL MLR-100 Modified | -4.80E-16     | 9.90E-16 | 9.92E-16 | 2.17E-15 | uCi/ml       |
| 11-04056-06                                                   | TRG         | 1001-562-1MA2 110119 | 01/19/11 10:57   | 4/8/2011     | 4/13/2011     | 3.56E+08    | 11-04056 | Gross Beta  | LANL MLR-100 Modified | -4.95E-16     | 6.96E-16 | 7.00E-16 | 1.56E-15 | uCi/ml       |
| 11-04056-07                                                   | TRG         | 1001-562-1MA2 110126 | 01/26/11 09:33   | 4/8/2011     | 4/13/2011     | 2.47E+08    | 11-04056 | Gross Beta  | LANL MLR-100 Modified | 1.07E-15      | 1.02E-15 | 1.03E-15 | 2.05E-15 | uCi/ml       |
| 11-04056-08                                                   | TRG         | 1001-562-1MA2 110202 | 02/02/11 13:33   | 4/8/2011     | 4/13/2011     | 2.64E+08    | 11-04056 | Gross Beta  | LANL MLR-100 Modified | 7.05E-16      | 9.07E-16 | 9.12E-16 | 1.86E-15 | uCi/ml       |
| 11-04056-09                                                   | TRG         | 1001-562-1MA2 110209 | 02/09/11 12:03   | 4/8/2011     | 4/13/2011     | 2.31E+08    | 11-04056 | Gross Beta  | LANL MLR-100 Modified | 6.13E-16      | 1.14E-15 | 1.15E-15 | 2.38E-15 | uCi/ml       |
| 11-04056-10                                                   | TRG         | 1001-562-1MA2 110216 | 02/16/11 07:40   | 4/8/2011     | 4/13/2011     | 2.77E+08    | 11-04056 | Gross Beta  | LANL MLR-100 Modified | 2.98E-16      | 8.77E-16 | 8.78E-16 | 1.85E-15 | uCi/ml       |
| 11-04056-11                                                   | TRG         | 1001-562-1MA2 110223 | 02/23/11 08:40   | 4/8/2011     | 4/13/2011     | 2.84E+08    | 11-04056 | Gross Beta  | LANL MLR-100 Modified | 1.03E-14      | 1.45E-15 | 2.03E-15 | 2.14E-15 | uCi/ml       |
| 11-04056-12                                                   | TRG         | 1001-562-1MA2 110302 | 03/02/11 08:58   | 4/8/2011     | 4/13/2011     | 2.79E+08    | 11-04056 | Gross Beta  | LANL MLR-100 Modified | 2.49E-16      | 8.56E-16 | 8.57E-16 | 1.81E-15 | uCi/ml       |
| 11-04056-13                                                   | TRG         | 1001-562-1MA2 110309 | 03/09/11 11:28   | 4/8/2011     | 4/13/2011     | 2.96E+08    | 11-04056 | Gross Beta  | LANL MLR-100 Modified | 1.02E-16      | 8.44E-16 | 8.44E-16 | 1.80E-15 | uCi/ml       |
| 11-04056-14                                                   | TRG         | 1001-562-1MA2 110316 | 03/16/11 10:50   | 4/8/2011     | 4/13/2011     | 2.71E+08    | 11-04056 | Gross Beta  | LANL MLR-100 Modified | -8.84E-16     | 8.68E-16 | 8.76E-16 | 1.98E-15 | uCi/ml       |
| 11-04056-15                                                   | TRG         | 1001-562-1MA2 110323 | 03/23/11 08:21   | 4/8/2011     | 4/13/2011     | 2.78E+08    | 11-04056 | Gross Beta  | LANL MLR-100 Modified | -4.06E-16     | 8.50E-16 | 8.52E-16 | 1.88E-15 | uCi/ml       |
| 11-04056-16                                                   | TRG         | 1001-562-1MA2 110330 | 03/30/11 08:58   | 4/8/2011     | 4/13/2011     | 2.93E+08    | 11-04056 | Gross Beta  | LANL MLR-100 Modified | -1.05E-16     | 8.58E-16 | 8.58E-16 | 1.85E-15 | uCi/ml       |

CU=Counting Uncertainty;CSU=Combined Standard Uncertainty (2-sigma);MDA=Minimal Detected Activity;LCS=Laboratory Control Sample; MBL=Blank; DUP=Duplicate; TRG=Normal Sample; DO=Duplicate Original

| <b>Eberline Analytical</b><br><b>Final Report of Analysis</b> |             |                      | Report To:       |             | Work Order Details: |          |          |          |              |
|---------------------------------------------------------------|-------------|----------------------|------------------|-------------|---------------------|----------|----------|----------|--------------|
|                                                               |             |                      | Debra Edwards    |             | 11-04057            |          |          |          |              |
|                                                               |             |                      | Urenco USA       |             | LES-GSA-3080        |          |          |          |              |
|                                                               |             |                      | 275 Hwy 176      |             | ENVIRONMENTAL       |          |          |          |              |
|                                                               |             |                      | Eunice, NM 88231 |             | AF                  |          |          |          |              |
| Lab ID                                                        | Sample Type | Client ID            | Sample Date      | Analyte     | Result              | CU       | CSU      | MDA      | Report Units |
| 11-04057-01                                                   | LCS         | KNOWN                | 04/12/11 00:00   | Gross Alpha | 3.14E-04            | 1.35E-05 |          |          | uCi/ml       |
| 11-04057-01                                                   | LCS         | SPIKE                | 04/12/11 00:00   | Gross Alpha | 3.04E-04            | 7.67E-06 | 3.41E-05 | 2.95E-07 | uCi/ml       |
| 11-04057-02                                                   | MBL         | BLANK                | 04/12/11 00:00   | Gross Alpha | -4.43E-17           | 2.88E-16 | 2.88E-16 | 7.51E-16 | uCi/ml       |
| 11-04057-03                                                   | DUP         | 1001-562-1MA1 110105 | 01/05/11 09:20   | Gross Alpha | -6.53E-16           | 3.52E-16 | 3.59E-16 | 1.12E-15 | uCi/ml       |
| 11-04057-04                                                   | DO          | 1001-562-1MA1 110105 | 01/05/11 09:20   | Gross Alpha | 2.22E-16            | 1.95E-16 | 1.96E-16 | 1.33E-16 | uCi/ml       |
| 11-04057-05                                                   | TRG         | 1001-562-1MA1 110112 | 01/12/11 11:22   | Gross Alpha | 0.00E+00            | 3.01E-16 | 3.01E-16 | 7.53E-16 | uCi/ml       |
| 11-04057-06                                                   | TRG         | 1001-562-1MA1 110119 | 01/19/11 11:00   | Gross Alpha | 2.50E-16            | 3.05E-16 | 3.06E-16 | 5.99E-16 | uCi/ml       |
| 11-04057-07                                                   | TRG         | 1001-562-1MA1 110126 | 01/26/11 09:37   | Gross Alpha | -7.21E-16           | 4.33E-16 | 4.40E-16 | 1.28E-15 | uCi/ml       |
| 11-04057-08                                                   | TRG         | 1001-562-1MA1 110202 | 02/02/11 13:36   | Gross Alpha | 4.33E-17            | 2.55E-16 | 2.55E-16 | 6.23E-16 | uCi/ml       |
| 11-04057-09                                                   | TRG         | 1001-562-1MA1 110209 | 02/09/11 12:00   | Gross Alpha | 9.39E-17            | 1.30E-16 | 1.31E-16 | 1.41E-16 | uCi/ml       |
| 11-04057-10                                                   | TRG         | 1001-562-1MA1 110216 | 02/16/11 07:39   | Gross Alpha | 1.89E-16            | 2.62E-16 | 2.63E-16 | 5.23E-16 | uCi/ml       |
| 11-04057-11                                                   | TRG         | 1001-562-1MA1 110223 | 02/23/11 08:41   | Gross Alpha | -3.80E-16           | 4.17E-16 | 4.19E-16 | 1.16E-15 | uCi/ml       |
| 11-04057-12                                                   | TRG         | 1001-562-1MA1 110302 | 03/02/11 09:00   | Gross Alpha | 4.54E-17            | 8.90E-17 | 8.92E-17 | 1.36E-16 | uCi/ml       |
| 11-04057-13                                                   | TRG         | 1001-562-1MA1 110309 | 03/09/11 11:29   | Gross Alpha | -1.79E-16           | 3.04E-16 | 3.04E-16 | 8.55E-16 | uCi/ml       |
| 11-04057-14                                                   | TRG         | 1001-562-1MA1 110316 | 03/16/11 10:53   | Gross Alpha | -9.63E-17           | 2.98E-16 | 2.99E-16 | 8.17E-16 | uCi/ml       |
| 11-04057-15                                                   | TRG         | 1001-562-1MA1 110323 | 03/23/11 08:23   | Gross Alpha | 1.40E-16            | 3.03E-16 | 3.04E-16 | 6.72E-16 | uCi/ml       |
| 11-04057-16                                                   | TRG         | 1001-562-1MA1 110330 | 03/30/11 08:57   | Gross Alpha | 1.32E-16            | 1.49E-16 | 1.50E-16 | 1.32E-16 | uCi/ml       |
| 11-04057-01                                                   | LCS         | KNOWN                | 04/12/11 00:00   | Gross Beta  | 2.32E-04            | 6.97E-06 |          |          | uCi/ml       |
| 11-04057-01                                                   | LCS         | SPIKE                | 04/12/11 00:00   | Gross Beta  | 2.51E-04            | 5.87E-06 | 3.51E-05 | 9.07E-07 | uCi/ml       |
| 11-04057-02                                                   | MBL         | BLANK                | 04/12/11 00:00   | Gross Beta  | -3.11E-16           | 8.91E-16 | 8.92E-16 | 1.95E-15 | uCi/ml       |
| 11-04057-03                                                   | DUP         | 1001-562-1MA1 110105 | 01/05/11 09:20   | Gross Beta  | -3.93E-16           | 8.73E-16 | 8.75E-16 | 1.92E-15 | uCi/ml       |
| 11-04057-04                                                   | DO          | 1001-562-1MA1 110105 | 01/05/11 09:20   | Gross Beta  | 3.75E-16            | 9.26E-16 | 9.27E-16 | 1.94E-15 | uCi/ml       |
| 11-04057-05                                                   | TRG         | 1001-562-1MA1 110112 | 01/12/11 11:22   | Gross Beta  | 4.87E-16            | 7.46E-16 | 7.49E-16 | 1.54E-15 | uCi/ml       |
| 11-04057-06                                                   | TRG         | 1001-562-1MA1 110119 | 01/19/11 11:00   | Gross Beta  | 2.25E-16            | 7.86E-16 | 7.87E-16 | 1.66E-15 | uCi/ml       |
| 11-04057-07                                                   | TRG         | 1001-562-1MA1 110126 | 01/26/11 09:37   | Gross Beta  | 2.39E-16            | 9.04E-16 | 9.05E-16 | 1.91E-15 | uCi/ml       |
| 11-04057-08                                                   | TRG         | 1001-562-1MA1 110202 | 02/02/11 13:36   | Gross Beta  | 3.04E-16            | 8.07E-16 | 8.08E-16 | 1.70E-15 | uCi/ml       |
| 11-04057-09                                                   | TRG         | 1001-562-1MA1 110209 | 02/09/11 12:00   | Gross Beta  | -3.13E-16           | 1.18E-15 | 1.18E-15 | 2.54E-15 | uCi/ml       |
| 11-04057-10                                                   | TRG         | 1001-562-1MA1 110216 | 02/16/11 07:39   | Gross Beta  | -4.13E-16           | 9.29E-16 | 9.31E-16 | 2.04E-15 | uCi/ml       |
| 11-04057-11                                                   | TRG         | 1001-562-1MA1 110223 | 02/23/11 08:41   | Gross Beta  | -2.98E-16           | 9.97E-16 | 9.98E-16 | 2.16E-15 | uCi/ml       |
| 11-04057-12                                                   | TRG         | 1001-562-1MA1 110302 | 03/02/11 09:00   | Gross Beta  | -5.59E-16           | 9.82E-16 | 9.85E-16 | 2.16E-15 | uCi/ml       |
| 11-04057-13                                                   | TRG         | 1001-562-1MA1 110309 | 03/09/11 11:29   | Gross Beta  | -2.07E-16           | 8.60E-16 | 8.61E-16 | 1.87E-15 | uCi/ml       |
| 11-04057-14                                                   | TRG         | 1001-562-1MA1 110316 | 03/16/11 10:53   | Gross Beta  | 1.00E-15            | 9.06E-16 | 9.16E-16 | 1.82E-15 | uCi/ml       |
| 11-04057-15                                                   | TRG         | 1001-562-1MA1 110323 | 03/23/11 08:23   | Gross Beta  | 3.01E-16            | 8.23E-16 | 8.24E-16 | 1.73E-15 | uCi/ml       |
| 11-04057-16                                                   | TRG         | 1001-562-1MA1 110330 | 03/30/11 08:57   | Gross Beta  | -1.31E-16           | 8.45E-16 | 8.46E-16 | 1.83E-15 | uCi/ml       |

CU=Counting Uncertainty;CSU=Combined Standard Uncertainty (2-sigma);MDA=Minimal Detected Activity;LCS=Laboratory Control Sample; MBL=Blank; DUP=Duplicate; TRG=Normal Sample; DO=Duplicate Original

| <b>Eberline Analytical</b><br><b>Final Report of Analysis</b> |             |                      | Report To:       |              |               |             |          |             | Work Order Details:   |               |          |          |          |              |
|---------------------------------------------------------------|-------------|----------------------|------------------|--------------|---------------|-------------|----------|-------------|-----------------------|---------------|----------|----------|----------|--------------|
|                                                               |             |                      | Debra Edwards    |              |               |             |          |             | SDG:                  | 11-04058      |          |          |          |              |
|                                                               |             |                      | Urenco USA       |              |               |             |          |             | Purchase Order:       | LES-GSA-3080  |          |          |          |              |
|                                                               |             |                      | 275 Hwy 176      |              |               |             |          |             | Analysis Category:    | ENVIRONMENTAL |          |          |          |              |
|                                                               |             |                      | Eunice, NM 88231 |              |               |             |          |             | Sample Matrix:        | AF            |          |          |          |              |
| Lab ID                                                        | Sample Type | Client ID            | Sample Date      | Receipt Date | Analysis Date | Volume (ml) | Batch ID | Analyte     | Method                | Result        | CU       | CSU      | MDA      | Report Units |
| 11-04058-01                                                   | LCS         | KNOWN                | 04/12/11 00:00   | 4/8/2011     | 4/13/2011     |             | 11-04058 | Gross Alpha | LANL MLR-100 Modified | 3.15E-04      | 1.35E-05 |          |          | uCi/ml       |
| 11-04058-01                                                   | LCS         | SPIKE                | 04/12/11 00:00   | 4/8/2011     | 4/13/2011     |             | 11-04058 | Gross Alpha | LANL MLR-100 Modified | 2.90E-04      | 7.55E-06 | 3.26E-05 | 5.64E-07 | uCi/ml       |
| 11-04058-02                                                   | MBL         | BLANK                | 04/12/11 00:00   | 4/8/2011     | 4/13/2011     |             | 11-04058 | Gross Alpha | LANL MLR-100 Modified | -2.09E-16     | 2.89E-16 | 2.90E-16 | 8.85E-16 | uCi/ml       |
| 11-04058-03                                                   | DUP         | 1300-562-1MA1 110105 | 01/05/11 09:16   | 4/8/2011     | 4/13/2011     | 2.76E+08    | 11-04058 | Gross Alpha | LANL MLR-100 Modified | -6.47E-16     | 3.84E-16 | 3.91E-16 | 1.19E-15 | uCi/ml       |
| 11-04058-04                                                   | DO          | 1300-562-1MA1 110105 | 01/05/11 09:16   | 4/8/2011     | 4/13/2011     | 2.76E+08    | 11-04058 | Gross Alpha | LANL MLR-100 Modified | -4.57E-17     | 1.55E-16 | 1.55E-16 | 5.05E-16 | uCi/ml       |
| 11-04058-05                                                   | TRG         | 1300-562-1MA1 110112 | 01/12/11 09:35   | 4/8/2011     | 4/13/2011     | 2.56E+08    | 11-04058 | Gross Alpha | LANL MLR-100 Modified | 4.93E-17      | 2.16E-16 | 2.16E-16 | 5.45E-16 | uCi/ml       |
| 11-04058-06                                                   | TRG         | 1300-562-1MA1 110119 | 01/19/11 10:25   | 4/8/2011     | 4/13/2011     | 2.77E+08    | 11-04058 | Gross Alpha | LANL MLR-100 Modified | -9.34E-17     | 3.42E-16 | 3.42E-16 | 8.92E-16 | uCi/ml       |
| 11-04058-07                                                   | TRG         | 1300-562-1MA1 110126 | 01/26/11 10:10   | 4/8/2011     | 4/13/2011     | 2.69E+08    | 11-04058 | Gross Alpha | LANL MLR-100 Modified | 4.86E-17      | 2.13E-16 | 2.13E-16 | 5.37E-16 | uCi/ml       |
| 11-04058-08                                                   | TRG         | 1300-562-1MA1 110202 | 02/02/11 09:46   | 4/8/2011     | 4/13/2011     | 2.57E+08    | 11-04058 | Gross Alpha | LANL MLR-100 Modified | -5.02E-16     | 3.63E-16 | 3.67E-16 | 1.17E-15 | uCi/ml       |
| 11-04058-09                                                   | TRG         | 1300-562-1MA1 110209 | 02/09/11 09:35   | 4/8/2011     | 4/13/2011     | 2.77E+08    | 11-04058 | Gross Alpha | LANL MLR-100 Modified | -1.40E-16     | 3.30E-16 | 3.30E-16 | 8.92E-16 | uCi/ml       |
| 11-04058-10                                                   | TRG         | 1300-562-1MA1 110216 | 02/16/11 10:21   | 4/8/2011     | 4/13/2011     | 2.78E+08    | 11-04058 | Gross Alpha | LANL MLR-100 Modified | 4.70E-17      | 2.06E-16 | 2.06E-16 | 5.20E-16 | uCi/ml       |
| 11-04058-11                                                   | TRG         | 1300-562-1MA1 110223 | 02/23/11 10:10   | 4/8/2011     | 4/13/2011     | 2.70E+08    | 11-04058 | Gross Alpha | LANL MLR-100 Modified | -2.12E-16     | 4.16E-16 | 4.17E-16 | 1.12E-15 | uCi/ml       |
| 11-04058-12                                                   | TRG         | 1300-562-1MA1 110302 | 03/02/11 10:21   | 4/8/2011     | 4/13/2011     | 2.67E+08    | 11-04058 | Gross Alpha | LANL MLR-100 Modified | 1.99E-16      | 1.95E-16 | 1.97E-16 | 1.50E-16 | uCi/ml       |
| 11-04058-13                                                   | TRG         | 1300-562-1MA1 110309 | 03/09/11 10:09   | 4/8/2011     | 4/13/2011     | 2.88E+08    | 11-04058 | Gross Alpha | LANL MLR-100 Modified | -2.76E-16     | 2.85E-16 | 2.87E-16 | 8.79E-16 | uCi/ml       |
| 11-04058-14                                                   | TRG         | 1300-562-1MA1 110316 | 03/16/11 09:18   | 4/8/2011     | 4/13/2011     | 2.80E+08    | 11-04058 | Gross Alpha | LANL MLR-100 Modified | -1.91E-16     | 2.65E-16 | 2.66E-16 | 8.11E-16 | uCi/ml       |
| 11-04058-15                                                   | TRG         | 1300-562-1MA1 110323 | 03/23/11 10:07   | 4/8/2011     | 4/13/2011     | 2.82E+08    | 11-04058 | Gross Alpha | LANL MLR-100 Modified | -9.36E-17     | 2.25E-16 | 2.25E-16 | 6.74E-16 | uCi/ml       |
| 11-04058-16                                                   | TRG         | 1300-562-1MA1 110330 | 03/30/11 09:50   | 4/8/2011     | 4/13/2011     | 2.81E+08    | 11-04058 | Gross Alpha | LANL MLR-100 Modified | 3.76E-16      | 2.60E-16 | 2.64E-16 | 1.41E-16 | uCi/ml       |
| 11-04058-01                                                   | LCS         | KNOWN                | 04/12/11 00:00   | 4/8/2011     | 4/13/2011     |             | 11-04058 | Gross Beta  | LANL MLR-100 Modified | 2.33E-04      | 6.98E-06 |          |          | uCi/ml       |
| 11-04058-01                                                   | LCS         | SPIKE                | 04/12/11 00:00   | 4/8/2011     | 4/13/2011     |             | 11-04058 | Gross Beta  | LANL MLR-100 Modified | 2.45E-04      | 5.88E-06 | 3.44E-05 | 8.55E-07 | uCi/ml       |
| 11-04058-02                                                   | MBL         | BLANK                | 04/12/11 00:00   | 4/8/2011     | 4/13/2011     |             | 11-04058 | Gross Beta  | LANL MLR-100 Modified | 3.05E-17      | 1.07E-15 | 1.07E-15 | 2.29E-15 | uCi/ml       |
| 11-04058-03                                                   | DUP         | 1300-562-1MA1 110105 | 01/05/11 09:16   | 4/8/2011     | 4/13/2011     | 2.76E+08    | 11-04058 | Gross Beta  | LANL MLR-100 Modified | -1.11E-16     | 9.44E-16 | 9.45E-16 | 2.04E-15 | uCi/ml       |
| 11-04058-04                                                   | DO          | 1300-562-1MA1 110105 | 01/05/11 09:16   | 4/8/2011     | 4/13/2011     | 2.76E+08    | 11-04058 | Gross Beta  | LANL MLR-100 Modified | -6.77E-16     | 9.84E-16 | 9.88E-16 | 2.18E-15 | uCi/ml       |
| 11-04058-05                                                   | TRG         | 1300-562-1MA1 110112 | 01/12/11 09:35   | 4/8/2011     | 4/13/2011     | 2.56E+08    | 11-04058 | Gross Beta  | LANL MLR-100 Modified | 1.46E-16      | 1.11E-15 | 1.11E-15 | 2.35E-15 | uCi/ml       |
| 11-04058-06                                                   | TRG         | 1300-562-1MA1 110119 | 01/19/11 10:25   | 4/8/2011     | 4/13/2011     | 2.77E+08    | 11-04058 | Gross Beta  | LANL MLR-100 Modified | -1.40E-15     | 9.98E-16 | 1.02E-15 | 2.29E-15 | uCi/ml       |
| 11-04058-07                                                   | TRG         | 1300-562-1MA1 110126 | 01/26/11 10:10   | 4/8/2011     | 4/13/2011     | 2.69E+08    | 11-04058 | Gross Beta  | LANL MLR-100 Modified | -8.20E-16     | 9.74E-16 | 9.81E-16 | 2.19E-15 | uCi/ml       |
| 11-04058-08                                                   | TRG         | 1300-562-1MA1 110202 | 02/02/11 09:46   | 4/8/2011     | 4/13/2011     | 2.57E+08    | 11-04058 | Gross Beta  | LANL MLR-100 Modified | -3.59E-16     | 1.24E-15 | 1.24E-15 | 2.68E-15 | uCi/ml       |
| 11-04058-09                                                   | TRG         | 1300-562-1MA1 110209 | 02/09/11 09:35   | 4/8/2011     | 4/13/2011     | 2.77E+08    | 11-04058 | Gross Beta  | LANL MLR-100 Modified | -1.12E-15     | 1.01E-15 | 1.02E-15 | 2.29E-15 | uCi/ml       |
| 11-04058-10                                                   | TRG         | 1300-562-1MA1 110216 | 02/16/11 10:21   | 4/8/2011     | 4/13/2011     | 2.78E+08    | 11-04058 | Gross Beta  | LANL MLR-100 Modified | -5.95E-16     | 9.54E-16 | 9.57E-16 | 2.11E-15 | uCi/ml       |
| 11-04058-11                                                   | TRG         | 1300-562-1MA1 110223 | 02/23/11 10:10   | 4/8/2011     | 4/13/2011     | 2.70E+08    | 11-04058 | Gross Beta  | LANL MLR-100 Modified | -1.15E-15     | 1.13E-15 | 1.15E-15 | 2.55E-15 | uCi/ml       |
| 11-04058-12                                                   | TRG         | 1300-562-1MA1 110302 | 03/02/11 10:21   | 4/8/2011     | 4/13/2011     | 2.67E+08    | 11-04058 | Gross Beta  | LANL MLR-100 Modified | -7.30E-16     | 1.07E-15 | 1.08E-15 | 2.37E-15 | uCi/ml       |
| 11-04058-13                                                   | TRG         | 1300-562-1MA1 110309 | 03/09/11 10:09   | 4/8/2011     | 4/13/2011     | 2.88E+08    | 11-04058 | Gross Beta  | LANL MLR-100 Modified | -2.39E-16     | 8.83E-16 | 8.83E-16 | 1.92E-15 | uCi/ml       |
| 11-04058-14                                                   | TRG         | 1300-562-1MA1 110316 | 03/16/11 09:18   | 4/8/2011     | 4/13/2011     | 2.80E+08    | 11-04058 | Gross Beta  | LANL MLR-100 Modified | 1.05E-15      | 9.03E-16 | 9.14E-16 | 1.80E-15 | uCi/ml       |
| 11-04058-15                                                   | TRG         | 1300-562-1MA1 110323 | 03/23/11 10:07   | 4/8/2011     | 4/13/2011     | 2.82E+08    | 11-04058 | Gross Beta  | LANL MLR-100 Modified | 7.43E-16      | 8.54E-16 | 8.60E-16 | 1.74E-15 | uCi/ml       |
| 11-04058-16                                                   | TRG         | 1300-562-1MA1 110330 | 03/30/11 09:50   | 4/8/2011     | 4/13/2011     | 2.81E+08    | 11-04058 | Gross Beta  | LANL MLR-100 Modified | 5.60E-17      | 9.14E-16 | 9.14E-16 | 1.96E-15 | uCi/ml       |

CU=Counting Uncertainty;CSU=Combined Standard Uncertainty (2-sigma);MDA=Minimal Detected Activity;LCS=Laboratory Control Sample; MBL=Blank; DUP=Duplicate; TRG=Normal Sample; DO=Duplicate Original

| Eberline Analytical<br>Final Report of Analysis |             |                         | Report To:       |              |               |             |          |             | Work Order Details: |               |          |          |          |              |
|-------------------------------------------------|-------------|-------------------------|------------------|--------------|---------------|-------------|----------|-------------|---------------------|---------------|----------|----------|----------|--------------|
|                                                 |             |                         | Debra Edwards    |              |               |             |          |             | SDG:                | 11-04100      |          |          |          |              |
|                                                 |             |                         | Urenco USA       |              |               |             |          |             | Purchase Order:     | LES-GSA-3080  |          |          |          |              |
|                                                 |             |                         | 275 Hwy 176      |              |               |             |          |             | Analysis Category:  | ENVIRONMENTAL |          |          |          |              |
|                                                 |             |                         | Eunice, NM 88231 |              |               |             |          |             | Sample Matrix:      | AF            |          |          |          |              |
| Lab ID                                          | Sample Type | Client ID               | Sample Date      | Receipt Date | Analysis Date | Volume (ml) | Batch ID | Analyte     | Method              | Result        | CU       | CSU      | MDA      | Report Units |
| 11-04100-01                                     | LCS         | KNOWN                   | 04/19/11 00:00   | 4/19/2011    | 4/22/2011     |             | 11-04100 | Uranium-234 | EML U-02 Modified   | 8.17E-06      | 2.94E-07 |          |          | uCi/ml       |
| 11-04100-01                                     | LCS         | SPIKE                   | 04/19/11 00:00   | 4/19/2011    | 4/22/2011     |             | 11-04100 | Uranium-234 | EML U-02 Modified   | 7.23E-06      | 1.18E-06 | 1.29E-06 | 7.15E-08 | uCi/ml       |
| 11-04100-02                                     | MBL         | BLANK                   | 04/19/11 00:00   | 4/19/2011    | 4/22/2011     |             | 11-04100 | Uranium-234 | EML U-02 Modified   | 2.05E-18      | 6.39E-18 | 6.39E-18 | 1.66E-17 | uCi/ml       |
| 11-04100-03                                     | DUP         | 1001-562-1MA1 QTR1 2011 | 03/30/11 09:50   | 4/19/2011    | 4/22/2011     | 1.90E+09    | 11-04100 | Uranium-234 | EML U-02 Modified   | 3.42E-17      | 3.12E-17 | 3.13E-17 | 3.72E-17 | uCi/ml       |
| 11-04100-04                                     | DO          | 1001-562-1MA1 QTR1 2011 | 03/30/11 09:50   | 4/19/2011    | 4/22/2011     | 1.90E+09    | 11-04100 | Uranium-234 | EML U-02 Modified   | 1.03E-17      | 1.79E-17 | 1.79E-17 | 3.33E-17 | uCi/ml       |
| 11-04100-05                                     | TRG         | 1001-562-1MA2 QTR1 2011 | 03/30/11 08:58   | 4/19/2011    | 4/22/2011     | 3.68E+09    | 11-04100 | Uranium-234 | EML U-02 Modified   | 1.63E-17      | 1.65E-17 | 1.65E-17 | 2.16E-17 | uCi/ml       |
| 11-04100-06                                     | TRG         | 1300-562-1MA1 QTR1 2011 | 03/30/11 09:50   | 4/19/2011    | 4/22/2011     | 3.56E+09    | 11-04100 | Uranium-234 | EML U-02 Modified   | 1.54E-17      | 1.57E-17 | 1.57E-17 | 2.05E-17 | uCi/ml       |
| 11-04100-01                                     | LCS         | SPIKE                   | 04/19/11 00:00   | 4/19/2011    | 4/22/2011     |             | 11-04100 | Uranium-235 | EML U-02 Modified   | 9.25E-07      | 2.69E-07 | 2.77E-07 | 7.92E-08 | uCi/ml       |
| 11-04100-02                                     | MBL         | BLANK                   | 04/19/11 00:00   | 4/19/2011    | 4/22/2011     |             | 11-04100 | Uranium-235 | EML U-02 Modified   | 1.47E-17      | 1.55E-17 | 1.55E-17 | 1.75E-17 | uCi/ml       |
| 11-04100-03                                     | DUP         | 1001-562-1MA1 QTR1 2011 | 03/30/11 09:50   | 4/19/2011    | 4/22/2011     | 1.90E+09    | 11-04100 | Uranium-235 | EML U-02 Modified   | 1.92E-17      | 2.72E-17 | 2.72E-17 | 4.59E-17 | uCi/ml       |
| 11-04100-04                                     | DO          | 1001-562-1MA1 QTR1 2011 | 03/30/11 09:50   | 4/19/2011    | 4/22/2011     | 1.90E+09    | 11-04100 | Uranium-235 | EML U-02 Modified   | -1.30E-18     | 2.61E-18 | 2.61E-18 | 3.50E-17 | uCi/ml       |
| 11-04100-05                                     | TRG         | 1001-562-1MA2 QTR1 2011 | 03/30/11 08:58   | 4/19/2011    | 4/22/2011     | 3.68E+09    | 11-04100 | Uranium-235 | EML U-02 Modified   | 2.60E-17      | 2.23E-17 | 2.23E-17 | 2.04E-17 | uCi/ml       |
| 11-04100-06                                     | TRG         | 1300-562-1MA1 QTR1 2011 | 03/30/11 09:50   | 4/19/2011    | 4/22/2011     | 3.56E+09    | 11-04100 | Uranium-235 | EML U-02 Modified   | 1.27E-17      | 1.48E-17 | 1.48E-17 | 1.12E-17 | uCi/ml       |
| 11-04100-01                                     | LCS         | KNOWN                   | 04/19/11 00:00   | 4/19/2011    | 4/22/2011     |             | 11-04100 | Uranium-238 | EML U-02 Modified   | 7.96E-06      | 2.87E-07 |          |          | uCi/ml       |
| 11-04100-01                                     | LCS         | SPIKE                   | 04/19/11 00:00   | 4/19/2011    | 4/22/2011     |             | 11-04100 | Uranium-238 | EML U-02 Modified   | 6.96E-06      | 1.14E-06 | 1.25E-06 | 7.12E-08 | uCi/ml       |
| 11-04100-02                                     | MBL         | BLANK                   | 04/19/11 00:00   | 4/19/2011    | 4/22/2011     |             | 11-04100 | Uranium-238 | EML U-02 Modified   | 1.33E-17      | 1.41E-17 | 1.41E-17 | 2.00E-17 | uCi/ml       |
| 11-04100-03                                     | DUP         | 1001-562-1MA1 QTR1 2011 | 03/30/11 09:50   | 4/19/2011    | 4/22/2011     | 1.90E+09    | 11-04100 | Uranium-238 | EML U-02 Modified   | 3.62E-17      | 3.09E-17 | 3.10E-17 | 2.84E-17 | uCi/ml       |
| 11-04100-04                                     | DO          | 1001-562-1MA1 QTR1 2011 | 03/30/11 09:50   | 4/19/2011    | 4/22/2011     | 1.90E+09    | 11-04100 | Uranium-238 | EML U-02 Modified   | 1.98E-18      | 1.31E-17 | 1.31E-17 | 4.01E-17 | uCi/ml       |
| 11-04100-05                                     | TRG         | 1001-562-1MA2 QTR1 2011 | 03/30/11 08:58   | 4/19/2011    | 4/22/2011     | 3.68E+09    | 11-04100 | Uranium-238 | EML U-02 Modified   | -6.13E-19     | 1.23E-18 | 1.23E-18 | 1.65E-17 | uCi/ml       |
| 11-04100-06                                     | TRG         | 1300-562-1MA1 QTR1 2011 | 03/30/11 09:50   | 4/19/2011    | 4/22/2011     | 3.56E+09    | 11-04100 | Uranium-238 | EML U-02 Modified   | 9.11E-18      | 1.20E-17 | 1.21E-17 | 1.84E-17 | uCi/ml       |

CU=Counting Uncertainty;CSU=Combined Standard Uncertainty (2-sigma);MDA=Minimal Detected Activity;LCS=Laboratory Control Sample; MBL=Blank; DUP=Duplicate; TRG=Normal Sample; DO=Duplicate Original

**URENCO**  
**URENCO**  
**SDG: 270910 A**

# GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Certificate of Analysis

Company : Urenco USA  
Address : Andrews 275 Hwy 176

Report Date: February 21, 2011

Contact: Eunice, New Mexico 88231  
Project: Mr. Matthew Graves  
URENCO

Client Sample ID: LS1-Wastewater-012111-01  
Sample ID: 270910007  
Matrix: Waste Water  
Collect Date: 21-JAN-11 09:36  
Receive Date: 22-JAN-11  
Collector: Client

Project: UREN00111  
Client ID: UREN001

| Parameter                                | Qualifier | Result   | Uncertainty | DL       | RL       | Units  | DF | Analyst | Date     | Time | Batch   | Method |
|------------------------------------------|-----------|----------|-------------|----------|----------|--------|----|---------|----------|------|---------|--------|
| <b>Rad Alpha Spec Analysis</b>           |           |          |             |          |          |        |    |         |          |      |         |        |
| <i>Alphaspec U, Liquid "As Received"</i> |           |          |             |          |          |        |    |         |          |      |         |        |
| Uranium-233/234                          |           | 1.70E-09 | +/-1.78E-10 | 1.45E-11 | 5.00E-11 | uCi/mL |    | HAK     | 01/27/11 | 1601 | 1067519 | 1      |
| Uranium-235/236                          |           | 5.39E-11 | +/-3.52E-11 | 1.80E-11 | 5.00E-11 | uCi/mL |    | B       |          |      |         |        |
| Uranium-238                              |           | 7.90E-10 | +/-1.22E-10 | 3.71E-11 | 5.00E-11 | uCi/mL |    |         |          |      |         |        |

### The following Analytical Methods were performed

| Method | Description                        | Analyst | Comments |
|--------|------------------------------------|---------|----------|
| 1      | DOE EML HASL-300, U-02-RC Modified |         |          |

| Surrogate/Tracer recovery | Test                              | Result | Nominal | Recovery% | Acceptable Limits |
|---------------------------|-----------------------------------|--------|---------|-----------|-------------------|
| Uranium-232 Tracer        | Alphaspec U, Liquid "As Received" |        |         | 89.1      | (15%-125%)        |

| Eberline Analytical<br>Final Report of Analysis |             |                      | Report To:       |              |               |             |          |             | Work Order Details:   |               |          |          |          |              |  |
|-------------------------------------------------|-------------|----------------------|------------------|--------------|---------------|-------------|----------|-------------|-----------------------|---------------|----------|----------|----------|--------------|--|
|                                                 |             |                      | Wes Terry        |              |               |             |          |             | SDG:                  | 11-07057      |          |          |          |              |  |
|                                                 |             |                      | URENCO USA       |              |               |             |          |             | Purchase Order:       | LES-GSA-3080  |          |          |          |              |  |
|                                                 |             |                      | 275 Hwy 176      |              |               |             |          |             | Analysis Category:    | ENVIRONMENTAL |          |          |          |              |  |
|                                                 |             |                      | Eunice, NM 88231 |              |               |             |          |             | Sample Matrix:        | AF            |          |          |          |              |  |
| Lab ID                                          | Sample Type | Client ID            | Sample Date      | Receipt Date | Analysis Date | Volume (ml) | Batch ID | Analyte     | Method                | Result        | CU       | CSU      | MDA      | Report Units |  |
| 11-07057-01                                     | LCS         | KNOWN                | 07/11/11 00:00   | 7/8/2011     | 7/13/2011     |             | 11-07057 | Gross Alpha | LANL MLR-100 Modified | 3.12E-04      | 1.34E-05 |          |          | uCi/ml       |  |
| 11-07057-01                                     | LCS         | SPIKE                | 07/11/11 00:00   | 7/8/2011     | 7/13/2011     |             | 11-07057 | Gross Alpha | LANL MLR-100 Modified | 2.68E-04      | 3.69E-06 | 2.95E-05 | 2.52E-07 | uCi/ml       |  |
| 11-07057-02                                     | MBL         | BLANK                | 07/11/11 00:00   | 7/8/2011     | 7/13/2011     |             | 11-07057 | Gross Alpha | LANL MLR-100 Modified | 1.82E-16      | 3.09E-16 | 3.09E-16 | 6.54E-16 | uCi/ml       |  |
| 11-07057-03                                     | DUP         | 1001-562-1MA2 110406 | 04/06/11 09:06   | 7/8/2011     | 7/13/2011     | 2.84E+08    | 11-07057 | Gross Alpha | LANL MLR-100 Modified | 4.54E-17      | 2.67E-16 | 2.67E-16 | 6.53E-16 | uCi/ml       |  |
| 11-07057-04                                     | DO          | 1001-562-1MA2 110406 | 04/06/11 09:06   | 7/8/2011     | 7/13/2011     | 2.84E+08    | 11-07057 | Gross Alpha | LANL MLR-100 Modified | 0.00E+00      | 2.52E-16 | 2.52E-16 | 6.53E-16 | uCi/ml       |  |
| 11-07057-05                                     | TRG         | 1001-562-1MA2 110413 | 04/13/11 14:44   | 7/8/2011     | 7/13/2011     | 2.80E+08    | 11-07057 | Gross Alpha | LANL MLR-100 Modified | -9.03E-17     | 3.31E-16 | 3.31E-16 | 8.64E-16 | uCi/ml       |  |
| 11-07057-06                                     | TRG         | 1001-562-1MA2 110420 | 04/20/11 13:17   | 7/8/2011     | 7/13/2011     | 2.90E+08    | 11-07057 | Gross Alpha | LANL MLR-100 Modified | -4.74E-16     | 3.48E-16 | 3.52E-16 | 1.05E-15 | uCi/ml       |  |
| 11-07057-07                                     | TRG         | 1001-562-1MA2 110427 | 04/27/11 08:58   | 7/8/2011     | 7/13/2011     | 2.84E+08    | 11-07057 | Gross Alpha | LANL MLR-100 Modified | -3.74E-16     | 3.67E-16 | 3.69E-16 | 1.06E-15 | uCi/ml       |  |
| 11-07057-08                                     | TRG         | 1001-562-1MA2 110504 | 05/04/11 09:01   | 7/8/2011     | 7/13/2011     | 2.83E+08    | 11-07057 | Gross Alpha | LANL MLR-100 Modified | -4.73E-17     | 1.60E-16 | 1.61E-16 | 5.23E-16 | uCi/ml       |  |
| 11-07057-09                                     | TRG         | 1001-562-1MA2 110511 | 05/11/11 09:38   | 7/8/2011     | 7/13/2011     | 2.89E+08    | 11-07057 | Gross Alpha | LANL MLR-100 Modified | -2.25E-16     | 3.42E-16 | 3.43E-16 | 9.46E-16 | uCi/ml       |  |
| 11-07057-10                                     | TRG         | 1001-562-1MA2 110518 | 05/18/11 08:32   | 7/8/2011     | 7/13/2011     | 2.69E+08    | 11-07057 | Gross Alpha | LANL MLR-100 Modified | 9.69E-16      | 4.79E-16 | 4.91E-16 | 5.64E-16 | uCi/ml       |  |
| 11-07057-11                                     | TRG         | 1001-562-1MA2 110525 | 05/25/11 10:15   | 7/8/2011     | 7/13/2011     | 2.93E+08    | 11-07057 | Gross Alpha | LANL MLR-100 Modified | -8.84E-17     | 3.24E-16 | 3.24E-16 | 8.45E-16 | uCi/ml       |  |
| 11-07057-12                                     | TRG         | 1001-562-1MA2 110601 | 06/01/11 10:14   | 7/8/2011     | 7/13/2011     | 2.94E+08    | 11-07057 | Gross Alpha | LANL MLR-100 Modified | -3.94E-16     | 3.74E-16 | 3.77E-16 | 1.07E-15 | uCi/ml       |  |
| 11-07057-13                                     | TRG         | 1001-562-1MA2 110608 | 06/08/11 12:50   | 7/8/2011     | 7/13/2011     | 3.08E+08    | 11-07057 | Gross Alpha | LANL MLR-100 Modified | 4.27E-17      | 2.51E-16 | 2.51E-16 | 6.14E-16 | uCi/ml       |  |
| 11-07057-14                                     | TRG         | 1001-562-1MA2 110615 | 06/15/11 08:50   | 7/8/2011     | 7/13/2011     | 2.94E+08    | 11-07057 | Gross Alpha | LANL MLR-100 Modified | -8.98E-17     | 3.29E-16 | 3.29E-16 | 8.58E-16 | uCi/ml       |  |
| 11-07057-15                                     | TRG         | 1001-562-1MA2 110622 | 06/22/11 09:55   | 7/8/2011     | 7/13/2011     | 3.04E+08    | 11-07057 | Gross Alpha | LANL MLR-100 Modified | -8.52E-17     | 3.12E-16 | 3.13E-16 | 8.14E-16 | uCi/ml       |  |
| 11-07057-16                                     | TRG         | 1001-562-1MA2 110629 | 06/29/11 08:39   | 7/8/2011     | 7/13/2011     | 2.86E+08    | 11-07057 | Gross Alpha | LANL MLR-100 Modified | -3.15E-16     | 4.04E-16 | 4.06E-16 | 1.10E-15 | uCi/ml       |  |
| 11-07057-01                                     | LCS         | KNOWN                | 07/11/11 00:00   | 7/8/2011     | 7/13/2011     |             | 11-07057 | Gross Beta  | LANL MLR-100 Modified | 2.30E-04      | 6.89E-06 |          |          | uCi/ml       |  |
| 11-07057-01                                     | LCS         | SPIKE                | 07/11/11 00:00   | 7/8/2011     | 7/13/2011     |             | 11-07057 | Gross Beta  | LANL MLR-100 Modified | 2.59E-04      | 3.02E-06 | 3.59E-05 | 5.76E-07 | uCi/ml       |  |
| 11-07057-02                                     | MBL         | BLANK                | 07/11/11 00:00   | 7/8/2011     | 7/13/2011     |             | 11-07057 | Gross Beta  | LANL MLR-100 Modified | -2.57E-16     | 9.33E-16 | 9.34E-16 | 2.03E-15 | uCi/ml       |  |
| 11-07057-03                                     | DUP         | 1001-562-1MA2 110406 | 04/06/11 09:06   | 7/8/2011     | 7/13/2011     | 2.84E+08    | 11-07057 | Gross Beta  | LANL MLR-100 Modified | 9.03E-16      | 9.51E-16 | 9.59E-16 | 1.93E-15 | uCi/ml       |  |
| 11-07057-04                                     | DO          | 1001-562-1MA2 110406 | 04/06/11 09:06   | 7/8/2011     | 7/13/2011     | 2.84E+08    | 11-07057 | Gross Beta  | LANL MLR-100 Modified | 2.65E-16      | 9.16E-16 | 9.17E-16 | 1.93E-15 | uCi/ml       |  |
| 11-07057-05                                     | TRG         | 1001-562-1MA2 110413 | 04/13/11 14:44   | 7/8/2011     | 7/13/2011     | 2.80E+08    | 11-07057 | Gross Beta  | LANL MLR-100 Modified | 5.23E-16      | 9.69E-16 | 9.72E-16 | 2.02E-15 | uCi/ml       |  |
| 11-07057-06                                     | TRG         | 1001-562-1MA2 110420 | 04/20/11 13:17   | 7/8/2011     | 7/13/2011     | 2.90E+08    | 11-07057 | Gross Beta  | LANL MLR-100 Modified | 1.55E-16      | 9.44E-16 | 9.44E-16 | 2.00E-15 | uCi/ml       |  |
| 11-07057-07                                     | TRG         | 1001-562-1MA2 110427 | 04/27/11 08:58   | 7/8/2011     | 7/13/2011     | 2.84E+08    | 11-07057 | Gross Beta  | LANL MLR-100 Modified | 1.19E-15      | 1.09E-15 | 1.10E-15 | 2.19E-15 | uCi/ml       |  |
| 11-07057-08                                     | TRG         | 1001-562-1MA2 110504 | 05/04/11 09:01   | 7/8/2011     | 7/13/2011     | 2.83E+08    | 11-07057 | Gross Beta  | LANL MLR-100 Modified | -3.32E-16     | 8.94E-16 | 8.95E-16 | 1.96E-15 | uCi/ml       |  |
| 11-07057-09                                     | TRG         | 1001-562-1MA2 110511 | 05/11/11 09:38   | 7/8/2011     | 7/13/2011     | 2.89E+08    | 11-07057 | Gross Beta  | LANL MLR-100 Modified | 6.28E-16      | 1.08E-15 | 1.09E-15 | 2.25E-15 | uCi/ml       |  |
| 11-07057-10                                     | TRG         | 1001-562-1MA2 110518 | 05/18/11 08:32   | 7/8/2011     | 7/13/2011     | 2.69E+08    | 11-07057 | Gross Beta  | LANL MLR-100 Modified | 0.00E+00      | 1.01E-15 | 1.01E-15 | 2.17E-15 | uCi/ml       |  |
| 11-07057-11                                     | TRG         | 1001-562-1MA2 110525 | 05/25/11 10:15   | 7/8/2011     | 7/13/2011     | 2.93E+08    | 11-07057 | Gross Beta  | LANL MLR-100 Modified | 7.70E-17      | 7.64E-16 | 7.64E-16 | 1.64E-15 | uCi/ml       |  |
| 11-07057-12                                     | TRG         | 1001-562-1MA2 110601 | 06/01/11 10:14   | 7/8/2011     | 7/13/2011     | 2.94E+08    | 11-07057 | Gross Beta  | LANL MLR-100 Modified | -5.47E-16     | 8.77E-16 | 8.80E-16 | 1.94E-15 | uCi/ml       |  |
| 11-07057-13                                     | TRG         | 1001-562-1MA2 110608 | 06/08/11 12:50   | 7/8/2011     | 7/13/2011     | 3.08E+08    | 11-07057 | Gross Beta  | LANL MLR-100 Modified | -4.82E-16     | 8.62E-16 | 8.64E-16 | 1.91E-15 | uCi/ml       |  |
| 11-07057-14                                     | TRG         | 1001-562-1MA2 110615 | 06/15/11 08:50   | 7/8/2011     | 7/13/2011     | 2.94E+08    | 11-07057 | Gross Beta  | LANL MLR-100 Modified | 3.74E-16      | 9.35E-16 | 9.36E-16 | 1.96E-15 | uCi/ml       |  |
| 11-07057-15                                     | TRG         | 1001-562-1MA2 110622 | 06/22/11 09:55   | 7/8/2011     | 7/13/2011     | 3.04E+08    | 11-07057 | Gross Beta  | LANL MLR-100 Modified | -4.95E-17     | 7.29E-16 | 7.29E-16 | 1.58E-15 | uCi/ml       |  |
| 11-07057-16                                     | TRG         | 1001-562-1MA2 110629 | 06/29/11 08:39   | 7/8/2011     | 7/13/2011     | 2.86E+08    | 11-07057 | Gross Beta  | LANL MLR-100 Modified | -6.96E-16     | 8.94E-16 | 8.99E-16 | 2.00E-15 | uCi/ml       |  |

CU=Counting Uncertainty;CSU=Combined Standard Uncertainty (2-sigma);MDA=Minimal Detected Activity;LCS=Laboratory Control Sample; MBL=Blank; DUP=Duplicate; TRG=Normal Sample; DO=Duplicate Original

| Eberline Analytical<br>Final Report of Analysis |             |                      | Report To:       |              |               |             |          |             | Work Order Details:   |               |          |          |          |              |
|-------------------------------------------------|-------------|----------------------|------------------|--------------|---------------|-------------|----------|-------------|-----------------------|---------------|----------|----------|----------|--------------|
|                                                 |             |                      | Wes Terry        |              |               |             |          |             | SDG:                  | 11-07058      |          |          |          |              |
|                                                 |             |                      | URENCO USA       |              |               |             |          |             | Purchase Order:       | LES-GSA-3080  |          |          |          |              |
|                                                 |             |                      | 275 Hwy 176      |              |               |             |          |             | Analysis Category:    | ENVIRONMENTAL |          |          |          |              |
|                                                 |             |                      | Eunice, NM 88231 |              |               |             |          |             | Sample Matrix:        | AF            |          |          |          |              |
| Lab ID                                          | Sample Type | Client ID            | Sample Date      | Receipt Date | Analysis Date | Volume (ml) | Batch ID | Analyte     | Method                | Result        | CU       | CSU      | MDA      | Report Units |
| 11-07058-01                                     | LCS         | KNOWN                | 07/11/11 00:00   | 7/8/2011     | 7/13/2011     |             | 11-07058 | Gross Alpha | LANL MLR-100 Modified | 3.15E-04      | 1.36E-05 |          |          | uCi/ml       |
| 11-07058-01                                     | LCS         | SPIKE                | 07/11/11 00:00   | 7/8/2011     | 7/13/2011     |             | 11-07058 | Gross Alpha | LANL MLR-100 Modified | 2.47E-04      | 3.46E-06 | 2.72E-05 | 1.82E-07 | uCi/ml       |
| 11-07058-02                                     | MBL         | BLANK                | 07/11/11 00:00   | 7/8/2011     | 7/13/2011     |             | 11-07058 | Gross Alpha | LANL MLR-100 Modified | -1.76E-16     | 3.45E-16 | 3.46E-16 | 9.28E-16 | uCi/ml       |
| 11-07058-03                                     | DUP         | 1001-562-1MA1 110406 | 04/06/11 09:08   | 7/8/2011     | 7/13/2011     | 2.88E+08    | 11-07058 | Gross Alpha | LANL MLR-100 Modified | -9.08E-17     | 2.18E-16 | 2.18E-16 | 6.53E-16 | uCi/ml       |
| 11-07058-04                                     | DO          | 1001-562-1MA1 110406 | 04/06/11 09:08   | 7/8/2011     | 7/13/2011     | 2.88E+08    | 11-07058 | Gross Alpha | LANL MLR-100 Modified | -6.94E-16     | 3.74E-16 | 3.81E-16 | 1.19E-15 | uCi/ml       |
| 11-07058-05                                     | TRG         | 1001-562-1MA1 110413 | 04/13/11 14:45   | 7/8/2011     | 7/13/2011     | 3.14E+08    | 11-07058 | Gross Alpha | LANL MLR-100 Modified | -1.70E-16     | 3.32E-16 | 3.33E-16 | 8.91E-16 | uCi/ml       |
| 11-07058-06                                     | TRG         | 1001-562-1MA1 110420 | 04/20/11 13:19   | 7/8/2011     | 7/13/2011     | 3.00E+08    | 11-07058 | Gross Alpha | LANL MLR-100 Modified | 1.32E-16      | 2.87E-16 | 2.87E-16 | 6.35E-16 | uCi/ml       |
| 11-07058-07                                     | TRG         | 1001-562-1MA1 110427 | 04/27/11 08:56   | 7/8/2011     | 7/13/2011     | 2.96E+08    | 11-07058 | Gross Alpha | LANL MLR-100 Modified | -9.05E-17     | 2.17E-16 | 2.17E-16 | 6.51E-16 | uCi/ml       |
| 11-07058-08                                     | TRG         | 1001-562-1MA1 110504 | 05/04/11 09:03   | 7/8/2011     | 7/13/2011     | 3.12E+08    | 11-07058 | Gross Alpha | LANL MLR-100 Modified | -5.92E-16     | 3.89E-16 | 3.94E-16 | 1.15E-15 | uCi/ml       |
| 11-07058-09                                     | TRG         | 1001-562-1MA1 110511 | 05/11/11 09:37   | 7/8/2011     | 7/13/2011     | 2.87E+08    | 11-07058 | Gross Alpha | LANL MLR-100 Modified | -1.38E-16     | 3.25E-16 | 3.25E-16 | 8.79E-16 | uCi/ml       |
| 11-07058-10                                     | TRG         | 1001-562-1MA1 110518 | 05/18/11 08:33   | 7/8/2011     | 7/13/2011     | 2.93E+08    | 11-07058 | Gross Alpha | LANL MLR-100 Modified | 1.79E-16      | 3.04E-16 | 3.05E-16 | 6.46E-16 | uCi/ml       |
| 11-07058-11                                     | TRG         | 1001-562-1MA1 110525 | 05/25/11 10:16   | 7/8/2011     | 7/13/2011     | 2.83E+08    | 11-07058 | Gross Alpha | LANL MLR-100 Modified | -1.37E-16     | 2.00E-16 | 2.00E-16 | 6.56E-16 | uCi/ml       |
| 11-07058-12                                     | TRG         | 1001-562-1MA1 110601 | 06/01/11 10:17   | 7/8/2011     | 7/13/2011     | 2.94E+08    | 11-07058 | Gross Alpha | LANL MLR-100 Modified | 2.30E-16      | 2.70E-16 | 2.71E-16 | 5.08E-16 | uCi/ml       |
| 11-07058-13                                     | TRG         | 1001-562-1MA1 110608 | 06/08/11 09:10   | 7/8/2011     | 7/13/2011     | 2.93E+08    | 11-07058 | Gross Alpha | LANL MLR-100 Modified | 1.76E-16      | 2.43E-16 | 2.44E-16 | 4.85E-16 | uCi/ml       |
| 11-07058-14                                     | TRG         | 1001-562-1MA1 110615 | 06/15/11 08:52   | 7/8/2011     | 7/13/2011     | 2.78E+08    | 11-07058 | Gross Alpha | LANL MLR-100 Modified | -2.80E-16     | 2.89E-16 | 2.91E-16 | 8.92E-16 | uCi/ml       |
| 11-07058-15                                     | TRG         | 1001-562-1MA1 110622 | 06/22/11 09:58   | 7/8/2011     | 7/13/2011     | 2.92E+08    | 11-07058 | Gross Alpha | LANL MLR-100 Modified | -4.43E-17     | 3.37E-16 | 3.37E-16 | 8.48E-16 | uCi/ml       |
| 11-07058-16                                     | TRG         | 1001-562-1MA1 110629 | 06/29/11 08:37   | 7/8/2011     | 7/13/2011     | 2.86E+08    | 11-07058 | Gross Alpha | LANL MLR-100 Modified | -4.05E-16     | 3.85E-16 | 3.87E-16 | 1.10E-15 | uCi/ml       |
| 11-07058-01                                     | LCS         | KNOWN                | 07/11/11 00:00   | 7/8/2011     | 7/13/2011     |             | 11-07058 | Gross Beta  | LANL MLR-100 Modified | 2.32E-04      | 6.95E-06 |          |          | uCi/ml       |
| 11-07058-01                                     | LCS         | SPIKE                | 07/11/11 00:00   | 7/8/2011     | 7/13/2011     |             | 11-07058 | Gross Beta  | LANL MLR-100 Modified | 2.40E-04      | 2.84E-06 | 3.33E-05 | 5.97E-07 | uCi/ml       |
| 11-07058-02                                     | MBL         | BLANK                | 07/11/11 00:00   | 7/8/2011     | 7/13/2011     |             | 11-07058 | Gross Beta  | LANL MLR-100 Modified | -7.94E-16     | 9.75E-16 | 9.82E-16 | 2.17E-15 | uCi/ml       |
| 11-07058-03                                     | DUP         | 1001-562-1MA1 110406 | 04/06/11 09:08   | 7/8/2011     | 7/13/2011     | 2.88E+08    | 11-07058 | Gross Beta  | LANL MLR-100 Modified | -2.46E-16     | 8.69E-16 | 8.70E-16 | 1.90E-15 | uCi/ml       |
| 11-07058-04                                     | DO          | 1001-562-1MA1 110406 | 04/06/11 09:08   | 7/8/2011     | 7/13/2011     | 2.88E+08    | 11-07058 | Gross Beta  | LANL MLR-100 Modified | -2.67E-16     | 9.03E-16 | 9.03E-16 | 1.97E-15 | uCi/ml       |
| 11-07058-05                                     | TRG         | 1001-562-1MA1 110413 | 04/13/11 14:45   | 7/8/2011     | 7/13/2011     | 3.14E+08    | 11-07058 | Gross Beta  | LANL MLR-100 Modified | 4.72E-16      | 7.89E-16 | 7.92E-16 | 1.64E-15 | uCi/ml       |
| 11-07058-06                                     | TRG         | 1001-562-1MA1 110420 | 04/20/11 13:19   | 7/8/2011     | 7/13/2011     | 3.00E+08    | 11-07058 | Gross Beta  | LANL MLR-100 Modified | -3.57E-16     | 8.63E-16 | 8.65E-16 | 1.89E-15 | uCi/ml       |
| 11-07058-07                                     | TRG         | 1001-562-1MA1 110427 | 04/27/11 08:56   | 7/8/2011     | 7/13/2011     | 2.96E+08    | 11-07058 | Gross Beta  | LANL MLR-100 Modified | -1.62E-16     | 9.06E-16 | 9.06E-16 | 1.96E-15 | uCi/ml       |
| 11-07058-08                                     | TRG         | 1001-562-1MA1 110504 | 05/04/11 09:03   | 7/8/2011     | 7/13/2011     | 3.12E+08    | 11-07058 | Gross Beta  | LANL MLR-100 Modified | 2.71E-15      | 9.66E-16 | 1.04E-15 | 1.76E-15 | uCi/ml       |
| 11-07058-09                                     | TRG         | 1001-562-1MA1 110511 | 05/11/11 09:37   | 7/8/2011     | 7/13/2011     | 2.87E+08    | 11-07058 | Gross Beta  | LANL MLR-100 Modified | 1.37E-16      | 9.44E-16 | 9.44E-16 | 2.01E-15 | uCi/ml       |
| 11-07058-10                                     | TRG         | 1001-562-1MA1 110518 | 05/18/11 08:33   | 7/8/2011     | 7/13/2011     | 2.93E+08    | 11-07058 | Gross Beta  | LANL MLR-100 Modified | -1.01E-15     | 8.75E-16 | 8.86E-16 | 2.01E-15 | uCi/ml       |
| 11-07058-11                                     | TRG         | 1001-562-1MA1 110525 | 05/25/11 10:16   | 7/8/2011     | 7/13/2011     | 2.83E+08    | 11-07058 | Gross Beta  | LANL MLR-100 Modified | 7.99E-16      | 9.49E-16 | 9.55E-16 | 1.94E-15 | uCi/ml       |
| 11-07058-12                                     | TRG         | 1001-562-1MA1 110601 | 06/01/11 10:17   | 7/8/2011     | 7/13/2011     | 2.94E+08    | 11-07058 | Gross Beta  | LANL MLR-100 Modified | -5.78E-16     | 8.95E-16 | 8.98E-16 | 1.98E-15 | uCi/ml       |
| 11-07058-13                                     | TRG         | 1001-562-1MA1 110608 | 06/08/11 09:10   | 7/8/2011     | 7/13/2011     | 2.93E+08    | 11-07058 | Gross Beta  | LANL MLR-100 Modified | -1.03E-16     | 8.34E-16 | 8.34E-16 | 1.80E-15 | uCi/ml       |
| 11-07058-14                                     | TRG         | 1001-562-1MA1 110615 | 06/15/11 08:52   | 7/8/2011     | 7/13/2011     | 2.78E+08    | 11-07058 | Gross Beta  | LANL MLR-100 Modified | -2.78E-16     | 1.00E-15 | 1.00E-15 | 2.17E-15 | uCi/ml       |
| 11-07058-15                                     | TRG         | 1001-562-1MA1 110622 | 06/22/11 09:58   | 7/8/2011     | 7/13/2011     | 2.92E+08    | 11-07058 | Gross Beta  | LANL MLR-100 Modified | 3.35E-16      | 7.83E-16 | 7.85E-16 | 1.64E-15 | uCi/ml       |
| 11-07058-16                                     | TRG         | 1001-562-1MA1 110629 | 06/29/11 08:37   | 7/8/2011     | 7/13/2011     | 2.86E+08    | 11-07058 | Gross Beta  | LANL MLR-100 Modified | -4.02E-16     | 9.11E-16 | 9.13E-16 | 2.00E-15 | uCi/ml       |

CU=Counting Uncertainty;CSU=Combined Standard Uncertainty (2-sigma);MDA=Minimal Detected Activity;LCS=Laboratory Control Sample; MBL=Blank; DUP=Duplicate; TRG=Normal Sample; DO=Duplicate Original

| <b>Eberline Analytical</b><br><b>Final Report of Analysis</b> |             |                      | Report To:       |              |               |             |          |             | Work Order Details:   |               |          |          |          |              |
|---------------------------------------------------------------|-------------|----------------------|------------------|--------------|---------------|-------------|----------|-------------|-----------------------|---------------|----------|----------|----------|--------------|
|                                                               |             |                      | Wes Terry        |              |               |             |          |             | SDG:                  | 11-07060      |          |          |          |              |
|                                                               |             |                      | URENCO USA       |              |               |             |          |             | Purchase Order:       | LES-GSA-3080  |          |          |          |              |
|                                                               |             |                      | 275 Hwy 176      |              |               |             |          |             | Analysis Category:    | ENVIRONMENTAL |          |          |          |              |
|                                                               |             |                      | Eunice, NM 88231 |              |               |             |          |             | Sample Matrix:        | AF            |          |          |          |              |
| Lab ID                                                        | Sample Type | Client ID            | Sample Date      | Receipt Date | Analysis Date | Volume (ml) | Batch ID | Analyte     | Method                | Result        | CU       | CSU      | MDA      | Report Units |
| 11-07060-01                                                   | LCS         | KNOWN                | 07/11/11 00:00   | 7/8/2011     | 7/13/2011     |             | 11-07060 | Gross Alpha | LANL MLR-100 Modified | 3.13E-04      | 1.35E-05 |          |          | uCi/ml       |
| 11-07060-01                                                   | LCS         | SPIKE                | 07/11/11 00:00   | 7/8/2011     | 7/13/2011     |             | 11-07060 | Gross Alpha | LANL MLR-100 Modified | 2.55E-04      | 3.52E-06 | 2.81E-05 | 2.42E-07 | uCi/ml       |
| 11-07060-02                                                   | MBL         | BLANK                | 07/11/11 00:00   | 7/8/2011     | 7/13/2011     |             | 11-07060 | Gross Alpha | LANL MLR-100 Modified | -3.12E-16     | 4.00E-16 | 4.02E-16 | 1.08E-15 | uCi/ml       |
| 11-07060-03                                                   | DUP         | 1300-562-1MA1 110406 | 04/06/11 10:08   | 7/8/2011     | 7/13/2011     | 2.80E+08    | 11-07060 | Gross Alpha | LANL MLR-100 Modified | -1.90E-16     | 4.16E-16 | 4.16E-16 | 1.08E-15 | uCi/ml       |
| 11-07060-04                                                   | DO          | 1300-562-1MA1 110406 | 04/06/11 10:08   | 7/8/2011     | 7/13/2011     | 2.80E+08    | 11-07060 | Gross Alpha | LANL MLR-100 Modified | -2.71E-16     | 2.80E-16 | 2.82E-16 | 8.64E-16 | uCi/ml       |
| 11-07060-05                                                   | TRG         | 1300-562-1MA1 110413 | 04/13/11 10:02   | 7/8/2011     | 7/13/2011     | 2.80E+08    | 11-07060 | Gross Alpha | LANL MLR-100 Modified | -4.01E-16     | 3.81E-16 | 3.83E-16 | 1.08E-15 | uCi/ml       |
| 11-07060-06                                                   | TRG         | 1300-562-1MA1 110420 | 04/20/11 09:36   | 7/8/2011     | 7/13/2011     | 2.82E+08    | 11-07060 | Gross Alpha | LANL MLR-100 Modified | -3.77E-16     | 3.69E-16 | 3.72E-16 | 1.07E-15 | uCi/ml       |
| 11-07060-07                                                   | TRG         | 1300-562-1MA1 110427 | 04/27/11 10:00   | 7/8/2011     | 7/13/2011     | 2.58E+08    | 11-07060 | Gross Alpha | LANL MLR-100 Modified | 1.04E-16      | 2.49E-16 | 2.49E-16 | 5.73E-16 | uCi/ml       |
| 11-07060-08                                                   | TRG         | 1300-562-1MA1 110504 | 05/04/11 14:29   | 7/8/2011     | 7/13/2011     | 2.87E+08    | 11-07060 | Gross Alpha | LANL MLR-100 Modified | -3.63E-16     | 3.08E-16 | 3.10E-16 | 9.53E-16 | uCi/ml       |
| 11-07060-09                                                   | TRG         | 1300-562-1MA1 110511 | 05/11/11 09:43   | 7/8/2011     | 7/13/2011     | 2.51E+08    | 11-07060 | Gross Alpha | LANL MLR-100 Modified | 0.00E+00      | 2.14E-16 | 2.14E-16 | 6.04E-16 | uCi/ml       |
| 11-07060-10                                                   | TRG         | 1300-562-1MA1 110518 | 05/18/11 09:56   | 7/8/2011     | 7/13/2011     | 2.75E+08    | 11-07060 | Gross Alpha | LANL MLR-100 Modified | -4.59E-17     | 2.38E-16 | 2.38E-16 | 6.60E-16 | uCi/ml       |
| 11-07060-11                                                   | TRG         | 1300-562-1MA1 110525 | 05/25/11 10:07   | 7/8/2011     | 7/13/2011     | 2.81E+08    | 11-07060 | Gross Alpha | LANL MLR-100 Modified | -1.84E-16     | 3.61E-16 | 3.61E-16 | 9.67E-16 | uCi/ml       |
| 11-07060-12                                                   | TRG         | 1300-562-1MA1 110601 | 06/01/11 10:07   | 7/8/2011     | 7/13/2011     | 2.75E+08    | 11-07060 | Gross Alpha | LANL MLR-100 Modified | -4.75E-17     | 2.46E-16 | 2.47E-16 | 6.84E-16 | uCi/ml       |
| 11-07060-13                                                   | TRG         | 1300-562-1MA1 110608 | 06/08/11 08:44   | 7/8/2011     | 7/13/2011     | 2.34E+08    | 11-07060 | Gross Alpha | LANL MLR-100 Modified | -5.12E-16     | 3.70E-16 | 3.74E-16 | 1.20E-15 | uCi/ml       |
| 11-07060-14                                                   | TRG         | 1300-562-1MA1 110615 | 06/15/11 10:14   | 7/8/2011     | 7/13/2011     | 2.76E+08    | 11-07060 | Gross Alpha | LANL MLR-100 Modified | -4.80E-17     | 2.49E-16 | 2.49E-16 | 6.91E-16 | uCi/ml       |
| 11-07060-15                                                   | TRG         | 1300-562-1MA1 110622 | 06/22/11 10:05   | 7/8/2011     | 7/13/2011     | 2.71E+08    | 11-07060 | Gross Alpha | LANL MLR-100 Modified | 9.88E-17      | 3.06E-16 | 3.06E-16 | 7.11E-16 | uCi/ml       |
| 11-07060-16                                                   | TRG         | 1300-562-1MA1 110629 | 06/29/11 10:14   | 7/8/2011     | 7/13/2011     | 8.17E+07    | 11-07060 | Gross Alpha | LANL MLR-100 Modified | -2.59E-15     | 1.42E-15 | 1.44E-15 | 4.39E-15 | uCi/ml       |
| 11-07060-17                                                   | TRG         | 11-226 110623        | 06/23/11 13:11   | 7/8/2011     | 7/13/2011     | 5.66E+08    | 11-07060 | Gross Alpha | LANL MLR-100 Modified | 6.76E-16      | 3.06E-16 | 3.15E-16 | 4.46E-16 | uCi/ml       |
| 11-07060-18                                                   | TRG         | 11-232 110630        | 06/30/11 16:00   | 7/8/2011     | 7/13/2011     | 5.81E+08    | 11-07060 | Gross Alpha | LANL MLR-100 Modified | 2.94E-16      | 2.03E-16 | 2.06E-16 | 3.26E-16 | uCi/ml       |

CU=Counting Uncertainty;CSU=Combined Standard Uncertainty (2-sigma);MDA=Minimal Detected Activity;LCS=Laboratory Control Sample; MBL=Blank; DUP=Duplicate; TRG=Normal Sample; DO=Duplicate Original

| <b>Eberline Analytical</b><br><b>Final Report of Analysis</b> |             |                      | Report To:       |              |               |             |          |            | Work Order Details:   |               |          |          |          |              |
|---------------------------------------------------------------|-------------|----------------------|------------------|--------------|---------------|-------------|----------|------------|-----------------------|---------------|----------|----------|----------|--------------|
|                                                               |             |                      | Wes Terry        |              |               |             |          |            | SDG:                  | 11-07060      |          |          |          |              |
|                                                               |             |                      | URENCO USA       |              |               |             |          |            | Purchase Order:       | LES-GSA-3080  |          |          |          |              |
|                                                               |             |                      | 275 Hwy 176      |              |               |             |          |            | Analysis Category:    | ENVIRONMENTAL |          |          |          |              |
|                                                               |             |                      | Eunice, NM 88231 |              |               |             |          |            | Sample Matrix:        | AF            |          |          |          |              |
| Lab ID                                                        | Sample Type | Client ID            | Sample Date      | Receipt Date | Analysis Date | Volume (ml) | Batch ID | Analyte    | Method                | Result        | CU       | CSU      | MDA      | Report Units |
| 11-07060-01                                                   | LCS         | KNOWN                | 07/11/11 00:00   | 7/8/2011     | 7/13/2011     |             | 11-07060 | Gross Beta | LANL MLR-100 Modified | 2.30E-04      | 6.90E-06 |          |          | uCi/ml       |
| 11-07060-01                                                   | LCS         | SPIKE                | 07/11/11 00:00   | 7/8/2011     | 7/13/2011     |             | 11-07060 | Gross Beta | LANL MLR-100 Modified | 2.55E-04      | 2.97E-06 | 3.53E-05 | 5.65E-07 | uCi/ml       |
| 11-07060-02                                                   | MBL         | BLANK                | 07/11/11 00:00   | 7/8/2011     | 7/13/2011     |             | 11-07060 | Gross Beta | LANL MLR-100 Modified | 1.05E-15      | 1.02E-15 | 1.03E-15 | 2.07E-15 | uCi/ml       |
| 11-07060-03                                                   | DUP         | 1300-562-1MA1 110406 | 04/06/11 10:08   | 7/8/2011     | 7/13/2011     | 2.80E+08    | 11-07060 | Gross Beta | LANL MLR-100 Modified | 2.86E-15      | 1.18E-15 | 1.24E-15 | 2.23E-15 | uCi/ml       |
| 11-07060-04                                                   | DO          | 1300-562-1MA1 110406 | 04/06/11 10:08   | 7/8/2011     | 7/13/2011     | 2.80E+08    | 11-07060 | Gross Beta | LANL MLR-100 Modified | 1.29E-15      | 1.01E-15 | 1.03E-15 | 2.02E-15 | uCi/ml       |
| 11-07060-05                                                   | TRG         | 1300-562-1MA1 110413 | 04/13/11 10:02   | 7/8/2011     | 7/13/2011     | 2.80E+08    | 11-07060 | Gross Beta | LANL MLR-100 Modified | 5.63E-16      | 9.99E-16 | 1.00E-15 | 2.07E-15 | uCi/ml       |
| 11-07060-06                                                   | TRG         | 1300-562-1MA1 110420 | 04/20/11 09:36   | 7/8/2011     | 7/13/2011     | 2.82E+08    | 11-07060 | Gross Beta | LANL MLR-100 Modified | 3.09E-15      | 1.18E-15 | 1.26E-15 | 2.21E-15 | uCi/ml       |
| 11-07060-07                                                   | TRG         | 1300-562-1MA1 110427 | 04/27/11 10:00   | 7/8/2011     | 7/13/2011     | 2.58E+08    | 11-07060 | Gross Beta | LANL MLR-100 Modified | 1.52E-16      | 1.01E-15 | 1.01E-15 | 2.15E-15 | uCi/ml       |
| 11-07060-08                                                   | TRG         | 1300-562-1MA1 110504 | 05/04/11 14:29   | 7/8/2011     | 7/13/2011     | 2.87E+08    | 11-07060 | Gross Beta | LANL MLR-100 Modified | 6.05E-16      | 1.09E-15 | 1.09E-15 | 2.26E-15 | uCi/ml       |
| 11-07060-09                                                   | TRG         | 1300-562-1MA1 110511 | 05/11/11 09:43   | 7/8/2011     | 7/13/2011     | 2.51E+08    | 11-07060 | Gross Beta | LANL MLR-100 Modified | -2.54E-16     | 1.07E-15 | 1.07E-15 | 2.33E-15 | uCi/ml       |
| 11-07060-10                                                   | TRG         | 1300-562-1MA1 110518 | 05/18/11 09:56   | 7/8/2011     | 7/13/2011     | 2.75E+08    | 11-07060 | Gross Beta | LANL MLR-100 Modified | -8.97E-16     | 9.70E-16 | 9.78E-16 | 2.17E-15 | uCi/ml       |
| 11-07060-11                                                   | TRG         | 1300-562-1MA1 110525 | 05/25/11 10:07   | 7/8/2011     | 7/13/2011     | 2.81E+08    | 11-07060 | Gross Beta | LANL MLR-100 Modified | -1.24E-15     | 9.97E-16 | 1.01E-15 | 2.26E-15 | uCi/ml       |
| 11-07060-12                                                   | TRG         | 1300-562-1MA1 110601 | 06/01/11 10:07   | 7/8/2011     | 7/13/2011     | 2.75E+08    | 11-07060 | Gross Beta | LANL MLR-100 Modified | 2.29E-16      | 9.40E-16 | 9.40E-16 | 1.99E-15 | uCi/ml       |
| 11-07060-13                                                   | TRG         | 1300-562-1MA1 110608 | 06/08/11 08:44   | 7/8/2011     | 7/13/2011     | 2.34E+08    | 11-07060 | Gross Beta | LANL MLR-100 Modified | 9.66E-16      | 1.08E-15 | 1.09E-15 | 2.20E-15 | uCi/ml       |
| 11-07060-14                                                   | TRG         | 1300-562-1MA1 110615 | 06/15/11 10:14   | 7/8/2011     | 7/13/2011     | 2.76E+08    | 11-07060 | Gross Beta | LANL MLR-100 Modified | 3.88E-16      | 9.82E-16 | 9.83E-16 | 2.06E-15 | uCi/ml       |
| 11-07060-15                                                   | TRG         | 1300-562-1MA1 110622 | 06/22/11 10:05   | 7/8/2011     | 7/13/2011     | 2.71E+08    | 11-07060 | Gross Beta | LANL MLR-100 Modified | -1.47E-16     | 9.91E-16 | 9.92E-16 | 2.14E-15 | uCi/ml       |
| 11-07060-16                                                   | TRG         | 1300-562-1MA1 110629 | 06/29/11 10:14   | 7/8/2011     | 7/13/2011     | 8.17E+07    | 11-07060 | Gross Beta | LANL MLR-100 Modified | 1.12E-14      | 3.73E-15 | 4.04E-15 | 6.73E-15 | uCi/ml       |
| 11-07060-17                                                   | TRG         | 11-226 110623        | 06/23/11 13:11   | 7/8/2011     | 7/13/2011     | 5.66E+08    | 11-07060 | Gross Beta | LANL MLR-100 Modified | 7.26E-15      | 7.87E-16 | 1.28E-15 | 1.02E-15 | uCi/ml       |
| 11-07060-18                                                   | TRG         | 11-232 110630        | 06/30/11 16:00   | 7/8/2011     | 7/13/2011     | 5.81E+08    | 11-07060 | Gross Beta | LANL MLR-100 Modified | 6.44E-15      | 7.57E-16 | 1.17E-15 | 1.01E-15 | uCi/ml       |

CU=Counting Uncertainty;CSU=Combined Standard Uncertainty (2-sigma);MDA=Minimal Detected Activity;LCS=Laboratory Control Sample; MBL=Blank; DUP=Duplicate; TRG=Normal Sample; DO=Duplicate Original

| Eberline Analytical<br>Final Report of Analysis |             |                         | Report To:       |              |               |          |          |             | Work Order Details: |               |          |          |          |              |
|-------------------------------------------------|-------------|-------------------------|------------------|--------------|---------------|----------|----------|-------------|---------------------|---------------|----------|----------|----------|--------------|
|                                                 |             |                         | Wes Terry        |              |               |          |          |             | SDG:                | 11-07111      |          |          |          |              |
|                                                 |             |                         | URENCO USA       |              |               |          |          |             | Purchase Order:     | LES-GSA-3080  |          |          |          |              |
|                                                 |             |                         | 275 Hwy 176      |              |               |          |          |             | Analysis Category:  | ENVIRONMENTAL |          |          |          |              |
|                                                 |             |                         | Eunice, NM 88231 |              |               |          |          |             | Sample Matrix:      | AF            |          |          |          |              |
| Lab ID                                          | Sample Type | Client ID               | Sample Date      | Recalpt Date | Analysis Date | Allquot  | Batch ID | Analyte     | Method              | Result        | CU       | CSU      | MDA      | Report Units |
| 11-07111-01                                     | LCS         | KNOWN                   | 07/19/11 00:00   | 7/19/2011    | 7/25/2011     |          | 11-07111 | Uranium-234 | EML U-02 Modified   | 8.19E-06      | 2.95E-07 |          |          | uCi/ml       |
| 11-07111-01                                     | LCS         | SPIKE                   | 07/19/11 00:00   | 7/19/2011    | 7/25/2011     |          | 11-07111 | Uranium-234 | EML U-02 Modified   | 8.09E-06      | 1.40E-06 | 1.51E-06 | 9.99E-08 | uCi/ml       |
| 11-07111-02                                     | MBL         | BLANK                   | 07/19/11 00:00   | 7/19/2011    | 7/25/2011     |          | 11-07111 | Uranium-234 | EML U-02 Modified   | 1.21E-17      | 1.33E-17 | 1.34E-17 | 2.02E-17 | uCi/ml       |
| 11-07111-03                                     | DUP         | 1001-562-1MA1 QTR2 2011 | 06/29/11 00:00   | 7/19/2011    | 7/25/2011     | 1.91E+09 | 11-07111 | Uranium-234 | EML U-02 Modified   | 9.62E-17      | 6.62E-17 | 6.65E-17 | 6.05E-17 | uCi/ml       |
| 11-07111-04                                     | DO          | 1001-562-1MA1 QTR2 2011 | 06/29/11 00:00   | 7/19/2011    | 7/25/2011     | 1.91E+09 | 11-07111 | Uranium-234 | EML U-02 Modified   | 1.45E-16      | 7.49E-17 | 7.56E-17 | 5.44E-17 | uCi/ml       |
| 11-07111-05                                     | TRG         | 1001-562-1MA2 QTR2 2011 | 06/29/11 00:00   | 7/19/2011    | 7/25/2011     | 3.76E+09 | 11-07111 | Uranium-234 | EML U-02 Modified   | 1.53E-16      | 4.98E-17 | 5.10E-17 | 1.93E-17 | uCi/ml       |
| 11-07111-06                                     | TRG         | 1300-562-1MA1 QTR2 2011 | 06/29/11 00:00   | 7/19/2011    | 7/25/2011     | 5.21E+09 | 11-07111 | Uranium-234 | EML U-02 Modified   | 1.63E-16      | 4.62E-17 | 4.76E-17 | 1.10E-17 | uCi/ml       |
| 11-07111-01                                     | LCS         | SPIKE                   | 07/19/11 00:00   | 7/19/2011    | 7/25/2011     |          | 11-07111 | Uranium-235 | EML U-02 Modified   | 5.98E-07      | 2.26E-07 | 2.30E-07 | 9.53E-08 | uCi/ml       |
| 11-07111-02                                     | MBL         | BLANK                   | 07/19/11 00:00   | 7/19/2011    | 7/25/2011     |          | 11-07111 | Uranium-235 | EML U-02 Modified   | -1.83E-18     | 2.13E-18 | 2.14E-18 | 2.15E-17 | uCi/ml       |
| 11-07111-03                                     | DUP         | 1001-562-1MA1 QTR2 2011 | 06/29/11 00:00   | 7/19/2011    | 7/25/2011     | 1.91E+09 | 11-07111 | Uranium-235 | EML U-02 Modified   | 3.33E-17      | 4.40E-17 | 4.41E-17 | 6.70E-17 | uCi/ml       |
| 11-07111-04                                     | DO          | 1001-562-1MA1 QTR2 2011 | 06/29/11 00:00   | 7/19/2011    | 7/25/2011     | 1.91E+09 | 11-07111 | Uranium-235 | EML U-02 Modified   | 2.75E-17      | 3.65E-17 | 3.65E-17 | 5.55E-17 | uCi/ml       |
| 11-07111-05                                     | TRG         | 1001-562-1MA2 QTR2 2011 | 06/29/11 00:00   | 7/19/2011    | 7/25/2011     | 3.76E+09 | 11-07111 | Uranium-235 | EML U-02 Modified   | 1.59E-17      | 1.61E-17 | 1.61E-17 | 1.05E-17 | uCi/ml       |
| 11-07111-06                                     | TRG         | 1300-562-1MA1 QTR2 2011 | 06/29/11 00:00   | 7/19/2011    | 7/25/2011     | 5.21E+09 | 11-07111 | Uranium-235 | EML U-02 Modified   | 1.33E-17      | 1.35E-17 | 1.36E-17 | 1.77E-17 | uCi/ml       |
| 11-07111-01                                     | LCS         | KNOWN                   | 07/19/11 00:00   | 7/19/2011    | 7/25/2011     |          | 11-07111 | Uranium-238 | EML U-02 Modified   | 7.98E-06      | 2.87E-07 |          |          | uCi/ml       |
| 11-07111-01                                     | LCS         | SPIKE                   | 07/19/11 00:00   | 7/19/2011    | 7/25/2011     |          | 11-07111 | Uranium-238 | EML U-02 Modified   | 8.23E-06      | 1.42E-06 | 1.53E-06 | 9.95E-08 | uCi/ml       |
| 11-07111-02                                     | MBL         | BLANK                   | 07/19/11 00:00   | 7/19/2011    | 7/25/2011     |          | 11-07111 | Uranium-238 | EML U-02 Modified   | 1.11E-17      | 1.18E-17 | 1.18E-17 | 1.33E-17 | uCi/ml       |
| 11-07111-03                                     | DUP         | 1001-562-1MA1 QTR2 2011 | 06/29/11 00:00   | 7/19/2011    | 7/25/2011     | 1.91E+09 | 11-07111 | Uranium-238 | EML U-02 Modified   | 1.80E-16      | 9.04E-17 | 9.13E-17 | 4.61E-17 | uCi/ml       |
| 11-07111-04                                     | DO          | 1001-562-1MA1 QTR2 2011 | 06/29/11 00:00   | 7/19/2011    | 7/25/2011     | 1.91E+09 | 11-07111 | Uranium-238 | EML U-02 Modified   | 1.11E-16      | 6.51E-17 | 6.56E-17 | 5.42E-17 | uCi/ml       |
| 11-07111-05                                     | TRG         | 1001-562-1MA2 QTR2 2011 | 06/29/11 00:00   | 7/19/2011    | 7/25/2011     | 3.76E+09 | 11-07111 | Uranium-238 | EML U-02 Modified   | 1.28E-16      | 4.51E-17 | 4.61E-17 | 2.36E-17 | uCi/ml       |
| 11-07111-06                                     | TRG         | 1300-562-1MA1 QTR2 2011 | 06/29/11 00:00   | 7/19/2011    | 7/25/2011     | 5.21E+09 | 11-07111 | Uranium-238 | EML U-02 Modified   | 1.62E-16      | 4.60E-17 | 4.74E-17 | 1.28E-17 | uCi/ml       |

CU=Counting Uncertainty;CSU=Combined Standard Uncertainty (2-sigma);MDA=Minimal Detected Activity;LCS=Laboratory Control Sample; MBL=Blank; DUP=Duplicate; TRG=Normal Sample; DO=Duplicate Original



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**URENCO**  
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**SDG: 275972**

# GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Certificate of Analysis

Company : Urenco USA  
Address : Andrews 275 Hwy 176

Eunice, New Mexico 88231

Report Date: April 26, 2011

Contact: Mr. Matthew Graves

Project: URENCO

Client Sample ID: LS1-Wastewater-041211-01

Project: UREN00111

Sample ID: 275972009

Client ID: UREN001

Matrix: Waste Water

Collect Date: 12-APR-11

Receive Date: 13-APR-11

Collector: Client

| Parameter                                | Qualifier | Result   | Uncertainty | DL       | TPU         | RL       | Units  | DF | Analyst | Date     | Time | Batch   | Mtd. |
|------------------------------------------|-----------|----------|-------------|----------|-------------|----------|--------|----|---------|----------|------|---------|------|
| <b>Rad Alpha Spec Analysis</b>           |           |          |             |          |             |          |        |    |         |          |      |         |      |
| <i>Alphaspec U, Liquid "As Received"</i> |           |          |             |          |             |          |        |    |         |          |      |         |      |
| Uranium-233/234                          |           | 1.10E-09 | +/-1.97E-10 | 9.76E-11 | +/-2.48E-10 | 5.00E-11 | uCi/mL |    | KXM4    | 04/23/11 | 1416 | 1094750 | 1    |
| Uranium-235/236                          |           | 4.36E-11 | +/-4.27E-11 | 3.27E-11 | +/-4.32E-11 | 5.00E-11 | uCi/mL |    |         |          |      |         |      |
| Uranium-238                              |           | 6.53E-10 | +/-1.53E-10 | 8.45E-11 | +/-1.77E-10 | 5.00E-11 | uCi/mL |    |         |          |      |         |      |

### **The following Analytical Methods were performed**

| Method | Description                        |
|--------|------------------------------------|
| 1      | DOE EML HASL-300, U-02-RC Modified |

| Surrogate/Tracer Recovery | Test                              | Batch ID | Recovery% | Acceptable Limits |
|---------------------------|-----------------------------------|----------|-----------|-------------------|
| Uranium-232 Tracer        | Alphaspec U, Liquid "As Received" | 1094750  | 96.0      | (15%-125%)        |

Notes: